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CAPITAL IMPROVEMENTS PROGRAM FOR THE OKLAHOMA STATE SYSTEM OF HIGHER EDUCATION, 1965-75. PHASE TWO.

BY- CLEEK, JOHN E. COFFELT, JOHN J.
OKLAHOMA STATE REGENTS FOR HIGHER EDUCATION

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THIS STUDY UPDATES THE 1963 TEN-YEAR PROJECTION OF CAPITAL IMPROVEMENTS FOR THE INSTITUTIONS OF THE OKLAHOMA STATE SYSTEM OF HIGHER EDUCATION. SPACE NEEDS OF THE STATE SYSTEM WERE DETERMINED BY A COMPARISON OF FACILITY INVENTORIES FOR CURRENT SPACE NEEDS AND PROJECTED SPACE NEEDS. THE SPACE NEEDS WERE TABULATED FOR CLASSROOMS, FACULTY OFFICES, LIBRARY, ADMINISTRATION AND RESEARCH FACILITIES. A PLAN FOR FINANCING THE PROJECTED IMPROVEMENTS IS PROPOSED. DATA COLLECTING SHEETS AND CODING SYSTEM IS GIVEN IN THE APPENDIXES. (HH)

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Capital Improvements Program

The Oklahoma State System of Higher Education

1965-1975

Phase Two

Oklahoma State Regents for Higher Education
State Capitol, Oklahoma City
February, 1968

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Capital Improvements Program

The Oklahoma State System of Higher Education

1965-1975

Phase Two

Prepared By

John E. Cleek

John J. Coffelt

U.S. DEPARTMENT OF HEALTH, EDUCATION & WELFARE
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Oklahoma State Regents for Higher Education
State Capitol, Oklahoma City
February, 1968

PREFACE

In the Fall of 1963 the State Regents made an extensive survey of the physical facilities on each campus in The Oklahoma State System of Higher Education. This survey provided the basis for a projection of the capital outlay funds needed over the 10-year period 1965-1975.

For funding purposes, this 10-year program was divided into two phases. Funds provided by the 1965 Oklahoma Building Bond Issue, together with available Federal matching funds were committed to accomplish the needs identified for the first phase of the 10-year program.

In February of 1965, the State Regents published a Progress Report which described the implementation of Phase One of the 10-Year Capital Improvements Program. At that time, the State Regents indicated their intention to update the survey of needs as of the 1967 Fall semester and to publish their findings in early 1968.

The State Regents are pleased, therefore, to submit herein a plan for completion of Phase Two of the 10-Year Capital Improvements Program for The Oklahoma State System of Higher Education, 1965-1975.

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CHAPTER I

INTRODUCTION

If the best education is "Mark Hopkins on one end of the log and a student on the other," this report should concern itself with the number of "logs" needed by 1975 to provide for the increasing numbers of Oklahoma students desiring a college education. Although the interchange of ideas between faculty and students is the key to education, the atmosphere which the physical surroundings create will either enhance or limit this interchange.

Background

Spiraling enrollments accompanied by rapid changes in both the content of the curriculum and the methods of instruction underscore the urgency of the space needs of the nations' colleges and universities. In response to these pressures the United States Congress enacted into law the Higher Education Facilities Act of 1963. This important legislation, signed by the President of the United States on December 16, 1963, has provided over $1 billion in support of the construction of urgently needed academic facilities in all fifty states. Federal funds provided by this legislation must be matched at a ratio of approximately $2 for each $1 received.

As a part of a series of studies relating to the present and future needs of Oklahoma Higher Education, the Oklahoma State Regents for Higher Education directed their staff to make a survey in the Fall of 1963 of the quantity and quality of space available at each institution in The Oklahoma State System of Higher Education. This survey also analyzed the level of utilization of this space and resulted in a projection of space needs for the period 1965-1975.

Following the publication of the results of this survey in December of 1964, the Thirtieth Oklahoma Legislature referred to the people of the State for their approval a proposed amendment to the Constitution authorizing a $54,750,000 bond issue for capital improvements. Of this amount, $38,500,000 was designated for higher education for accomplishing Phase One (1965-1970) of the ten-year program. At a special election on December 14,1965, the citizens of Oklahoma approved State Question #433 which authorized the issuance of bonds for capital improvements.

In anticipation of the approval of this bond issue by the people of the State, the State Regents directed their staff in the Fall of 1965 to completely update the

survey of facilities needed at each institution within the State System in order to make allocation of the funds available on the basis of current and anticipated needs. As a part of the 1965 updating, each institution in the State System prepared a ten-year plan for campus development setting forth the projects to be accomplished within the space needs as projected.

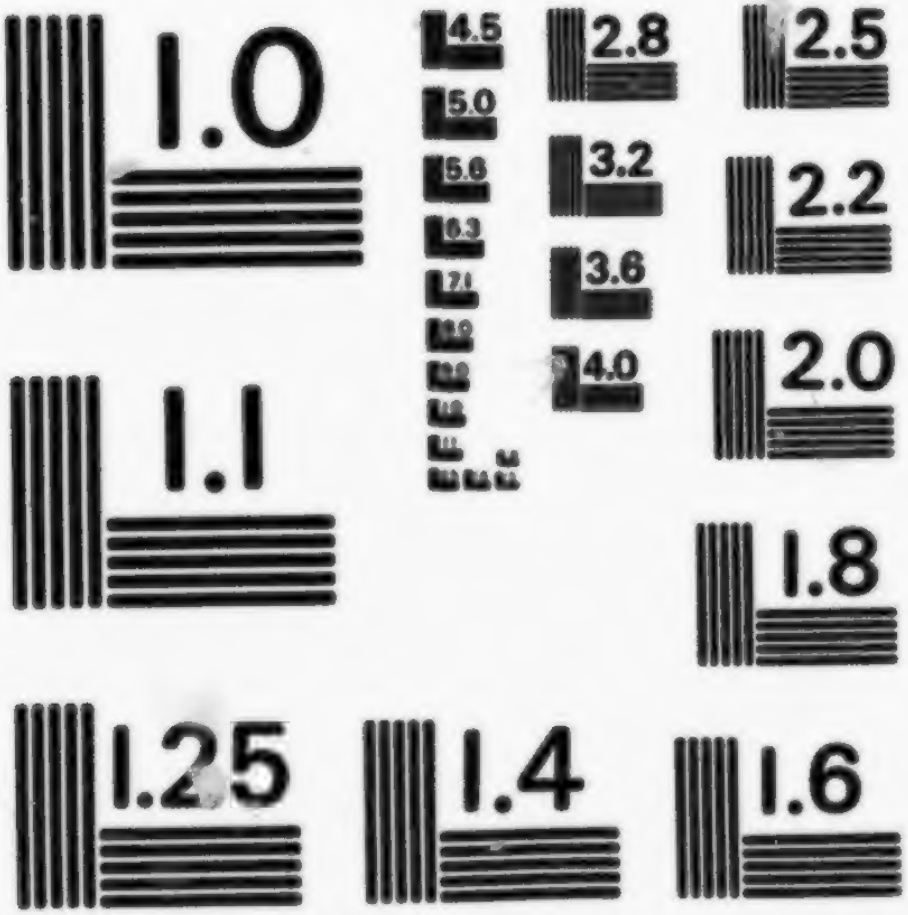
The results of the updating survey revealed that enrollments were increasing at a more rapid rate than had been previously anticipated. Therefore, the funds available for the period 1965-1970 were inadequate to fully fund all of the space needs projected for the first five years. A Progress Report setting forth the actions of the State Regents to implement the 1965 Building Bond Issue was published in February of 1965. In this report the State Regents indicated their plans to update the facilities survey as of the Fall term, 1967, and to present to the Governor and to the Legislature in January of 1968 a plan for completing the first phase of the ten-year program and for implementing the second phase of this program.

Federal-State Planning Partnership.-- Although the need for a maximum effort on the part of both Federal and State governments to provide additional academic facilities was clearly evident when the Higher Education Facilities Act was passed in the Fall of 1963, it was soon recognized that the most efficient use of available funds would result from careful and comprehensive long-range planning. Therefore, as a part of the Higher Education Amendments of 1966, the Federal Congress authorized the appropriation of $4 million to be allocated to State Commissions to assist them in ". . . comprehensive planning to determine the construction needs of institutions of higher education." The head start which Oklahoma has achieved in this field has served both as an example for other states to follow and as a pattern to be improved upon in the further development of long-range facilities planning in Oklahoma.

Procedures

The present study involves a further updating of the ten-year projection of capital improvements needs for institutions of higher education which comprise The Oklahoma State System of Higher Education. A subsequent study will report the results of a survey of the capital improvements needs of the private and municipal institucions.

Space Currently Available.--Basic to a determination of the additional resources which will be needed in order to provide adequate space for the programs of the



MICROCOPY RESOLUTION TEST CHART
NATIONAL BUREAU OF STANDARDS-1963-A

institutions of higher education in Oklahoma is an accurate and up-to-date inventory of the resources presently available. In recognition of this fact, the State Regents maintain a current inventory of all academic facilities on a room-by-room basis classified as to type of room (for example, classroom, class laboratory, office, etc.), functional assignment (for example, instruction, research, administration, etc.), and subject field (for example, biological science, fine arts, physical education, etc.).

The first inventory of facilities conducted by the State Regents' staff in the Fall of 1963, employed what was considered at that time to be the best classification techniques and definitions of space available. The 1967 inventory is the first to employ a standard classification system which will be used by institutions and state agencies in all fifty states. The development of such a standard classification system sponsored by the U. S. Office of Education represents a major breakthrough in the field of higher education facilities studies.[1] Because of the previous experience of the Oklahoma State Regents for Higher Education in this field of planning, a member of the State Regents' staff was invited to participate in the development of this classification system. He served first as a member of the twelve-man advisory committee assembled by the Office of Education for this purpose and later as a member of the three man writing committee to develop the final report.

If the inventory of space currently available is to be of maximum utility, it must include, in addition to the quantitative survey of space, a qualitative analysis of that space. This analysis was also a part of the 1963 inventory and has been reviewed as a part of the 1967 updating of the survey. In determining future needs for institutions of higher education, buildings which have been classified as obsolescent or unsafe have been eliminated from the inventory of "net permanent space" thereby presenting a picture of the amount of space currently available which can be continued in use indefinitely.

Total Space Needs Projected to 1975.-- In connection with the projection of space needs to 1975, a Technical Advisory Committee on Facilities Planning was appoint-

[1]U. S. Office of Education, Facilities Classifications and Inventory Procedures for Institutions and State Agencies (Washington: U. S. Department of Health, Education and Welfare, August, 1967).

ed to advise with the State Regents' staff as to the procedures, standards of utilization, and space factors previously employed. The membership of this Technical Advisory Committee was representative of all institutions of higher education in Oklahoma, both as to type of control and as to type of organization.[1] The staff and Advisory Committee were assisted in their review by Dr. Harold Dahnke, Director of Space Utilization, Michigan State University, whose wide experience in this field was extremely helpful.

Guiding Principles.-- Standards to be used in determining need must necessarily be established on an arbitrary basis. They may be based on average practice or some point on a scale where a certain percentage of the institutions lie. They can be based on a theoretical computation which might appear reasonable to persons sophisticated in facilities space planning.[2]

In order to insure the highest possible degree of equity among institutions as well as to provide for reasonable flexibility, the following Guiding Principles were adopted as the basis for review of space factors used in projecting future needs.

1. Factors should be kept broad in nature in order to permit maximum in-

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[1]The membership of this committee consisted of: Dr. James Boggs, Vice President for Academic Affairs, Oklahoma State University; Dr. Edward Brandt, Jr., Assistant to Vice President for Medical Center Affairs, University of Oklahoma Medical Center; Dr. William H. Hale, President, Langston University; Dr. Al Harris, President, Southwestern State College; Dr. Art Harrison, Dean, El Reno Community College; Dr. William Neptune, Dean of Arts and Science, Oklahoma Baptist University; Mr. Lee Rodgers, Professor of Planning, University of Oklahoma; Dr. Asbury Smith, Chairman, Department of Industrial Arts, Central State College; Dr. Eugene Swearingen, President, University of Tulsa; Dr. Edwin Vineyard, President, Northern Oklahoma College; Mr. Walter Williams, Vice President for Business Affairs, Eastern Oklahoma State College.

[2]Space and Utilization Standards, California Public Higher Education, Coordinating Council for Higher Education (Sacramento: September, 1966).

stitutional flexibility with respect to campus master planning.

2. Factors should be equitable for all institutions when concerned with the same levels of instruction.
3. Factors should be equitable for all institutions when concerned with the same subject field areas.
4. Factors should recognize that as enrollment increases, the level of utilization of certain types of space should increase.
5. Factors should recognize that institutions will necessarily have lower utilization of highly specialized facilities. Where such facilities are essential to the functions and programs of the institution, the lower utilization of such space should not reflect against the need for other kinds of instructional space.
6. Factors should be periodically reviewed and modified to keep abreast of changing needs, changing curricular patterns, and new teaching methods.

Space Factors.-- The projection of space needs as of some future point in time requires that certain assumptions be made regarding the nature of the programs to be housed and the size of the instructional load anticipated as of that assumed point in time. Different types of space will need to be related to different types of measuring sticks. For example, classroom space may be related to the number of students, or, more accurately, to the number of hours students may be expected to occupy a seat in a classroom during a given week.

Other types of facilities require assumptions regarding other facets of the institutional program. For example, to project the library space requirements of an institution, it is necessary to know something about the expected use of the library, how many students will use the library at one time, how many volumes are presently housed, and how much the institution will spend for new acquisitions each year.

The method used in this study for projecting the nature and scope of the instructional program as of the assumed future enrollment plateau has been to analyze the nature and scope of the existing instructional program and on the basis of the rate of enrollment increase expected for each institution to project this instructional program into the future. To the extent that changes occur in terms of

the nature or emphasis of the curriculum or instructional program at each institution, this procedure will need to be reviewed. This limitation emphasizes the importance of Guiding Principles 1 and 6 regarding flexibility and review of standards.

Analysis of the existing instructional program at each institution was made by means of a listing of all classes taught during the 1967 Fall semester. These listings were submitted by institutional personnel on Form CMP 2-67, a copy of which is included in Appendix B. By means of a specially written computer program, this data was compared with the inventory of facilities so as to determine the type of room in which each class was taught and subsequently, to summarize the number of weekly student clock hours produced in classrooms, class laboratories, and other types of instructional facilities within each subject field.

As indicated previously, the resulting picture of the nature and scope of the instructional load of each institution was then projected into the future on the basis of the rate of increase in enrollment projected for that institution. Each institution was asked to submit a carefully documented projection of its expected enrollment growth through 1975. These projections, developed by institutional personnel, were then compared with a set of enrollment projections independently prepared by a member of the State Regents' staff. In most cases, these two sets of enrollment projections were in substantial agreement. However, a conference was held with each President to resolve any differences by means of a review of recent enrollment trends and other pertinent factors.

Table 1.1 presents a summary of the actual enrollment figures for the 1967 Fall semester which serve as the base line for the projection of space needs. Table 1.2 presents the 1975 enrollment projections used in this study.

At the time of the 1963 survey of facilities, the State Regents adopted a series of space standards for use in determining the amount of additional space of each type which an institution would require, if minimum standards of utilization were achieved. These standards have been carefully reviewed in the light of the experience of the past four years, both in Oklahoma and in other states. The purpose of this review was to refine and improve upon these standards where experience dictated the need for such improvement and to

TABLE 1.1

ACTUAL ENROLLMENT BY LEVEL
THE OKLAHOMA STATE SYSTEM OF HIGHER EDUCATION[a]
FALL SEMESTER 1967

Institution	Student-Credit-Hours				Full-Time-Equivalent Enrollment			
	Undergraduate		Graduate Division	Total	Undergraduate[b]		Graduate Division[c]	Total
	Lower Division	Upper Division			Lower Division	Upper Division		
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
OU	99,806	82,658	33,331	215,795	6,654	5,510	2,777	14,941
OSU	120,936	95,958	16,591	233,485	8,062	6,397	1,383	15,842
CSC	61,679	42,866	3,741	108,286	4,112	2,858	312	7,282
ECSC	26,325	13,941	538	40,804	1,755	929	45	2,729
NESC	40,953	34,053	1,942	76,948	2,730	2,270	162	5,162
NWSC	20,962	12,503	824	34,289	1,397	834	69	2,300
SESC	15,552	13,003	531	29,086	1,037	867	44	1,948
SWSC	35,914	26,791	1,621	64,326	2,394	1,786	135	4,315
Cameron	33,183	. .	. .	33,183	2,212	. .	. .	2,212
Langston	12,003	8,956	. .	20,959	800	597	. .	1,397
OCLA	8,211	5,865	. .	14,076	547	391	. .	938
Panhandle	10,890	7,256	. .	18,146	726	484	. .	1,210
Connors	8,728	. .	. .	8,728	582	. .	. .	582
Eastern	17,107	. .	. .	17,107	1,140	. .	. .	1,140
Murray	10,813	. .	. .	10,813	721	. .	. .	721
NEOAMC	30,988	. .	. .	30,988	2,066	. .	. .	2,066
NOC	14,301	. .	. .	14,301	953	. .	. .	953
OMA	10,938	. .	. .	10,938	729	. .	. .	729
TOTALS	579,289	343,850	59,119	982,258	38,617	22,923	4,927	66,467

[a]Excludes School of Medicine, School of Nursing, and technical schools at Okmulgee and Oklahoma City.
[b]The full-time-equivalent enrollment for undergraduate students is calculated by dividing the figure 15 into the student-credit-hours enrolled in by all undergraduate students.
[c]The full-time-equivalent enrollment for graduate students is calculated by dividing the figure 12 into the student-credit-hours enrolled in by all graduate students.

translate these standards into a series of "space factors" which would facilitate their use in relating the instructional load data to the type and amount of space required to properly serve the instructional program. The restatement of the space standards in terms of a set of space factors also makes it possible for these standards to be readily compared with those in use in other states, thereby providing a basis for evaluating the relative need of institutions of higher education in Oklahoma as compared with institutions in other states.

In connection with each of the types of

TABLE 1.2

PROJECTED ENROLLMENT BY LEVEL
THE OKLAHOMA STATE SYSTEM OF HIGHER EDUCATION[a]
FALL SEMESTER 1975

Institution	Student-Credit-Hours				Full-Time-Equivalent Enrollment			
	Undergraduate		Graduate Division	Total	Undergraduate[b]		Graduate[c] Division	Total
	Lower Division	Upper Division			Lower Division	Upper Division		
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
OU	142,270	124,500	60,000	326,770	9,485	8,300	5,000	22,785
OSU	161,625	142,230	31,000	334,855	10,775	9,482	2,583	22,840
CSC	96,075	75,945	8,785	180,805	6,405	5,063	732	12,200
ECSC	38,370	20,420	2,475	61,265	2,558	1,361	206	4,125
NESC	68,475	60,375	4,320	133,170	4,565	4,025	360	8,950
NWSC	31,920	25,230	2,280	59,430	2,128	1,682	190	4,000
SESC	23,175	19,995	1,825	44,995	1,545	1,333	152	3,030
SWSC	51,345	44,250	2,904	98,499	3,423	2,950	242	6,615
Cameron	52,740	35,160	. .	87,900	3,516	2,344	. .	5,860
Langston	20,090	15,910	. .	36,000	1,339	1,061	. .	2,400
OCLA[d]	24,300	20,700	. .	45,000	1,620	1,380	. .	3,000
Panhandle	17,400	12,600	. .	30,000	1,160	840	. .	2,000
Connors	18,000	. .	. .	18,000	1,200	. .	. .	1,200
Eastern	29,625	. .	. .	29,625	1,975	. .	. .	1,975
Murray	20,250	. .	. .	20,250	1,350	. .	. .	1,350
NEOAMC	48,000	. .	. .	48,000	3,200	. .	. .	3,200
NOC	23,625	. .	. .	23,625	1,575	. .	. .	1,575
OHA	19,950	. .	. .	19,950	1,330	. .	. .	1,330
TOTALS	887,235	597,315	113,589	1,598,139	59,149	39,821	9,465	108,435

[a]Excludes School of Medicine, School of Nursing, and technical schools at Okmulgee and Oklahoma City.
[b]The full-time-equivalent enrollment for undergraduate students is calculated by dividing the figure 15 into the student-credit-hours enrolled in by all undergraduate students.
[c]The full-time-equivalent enrollment for graduate students is calculated by dividing the figure 12 into the student-credit-hours enrolled in by all graduate students.
[d]Planning figures only.

space discussed in Chapters II-VII of this report, the pertinent space factor and the utilization standard on which it is based will be discussed. Data will also be presented regarding the adequacy of existing space at each institution in relation to current enrollment.

Space Under Construction.--A major technical problem confronted in any study of the future space needs of institutions of higher education arises from the fact that most institutions either have space under construction or have funds available for projects to be initiated in the immediate

future. This problem was unusually acute in the present study due to the fact that Oklahoma institutions of higher education are in the midst of the most extensive capital improvements program ever carried out in Oklahoma.

In consideration of this fact an inventory of all space under construction or for which funds were available at the time of the study was necessary. The amount of this type of space has been deducted from the space needs as projected for each institution of higher education. Adjustments have also been made to reflect the net effect of any alteration or conversion of existing facilities included as a part of Phase One of the Capital Improvements Program.

Contents of the Report

Chapters II-VII will present a detailed treatment of the current and future needs of institutions for facilities to house the functions of Instruction, Library, and Administration. Chapter VIII will set forth the progress, problems, and future prospects with regard to the need for special research facilities.

Chapter IX will summarize the need for funds for each of the types of space discussed in this report together with certain additional needs such as summer air-conditioning of existing academic buildings and facilities for technical education.

CHAPTER II

GENERAL CLASSROOM SPACE NEEDS

The amount of general classroom space required to accomodate properly the student enrollment at an institution of higher education is related to two basic considerations: (1) The number of weekly student-clock-hours (WSCH) produced--which in turn is a function of the number of hours during a given week that a typical classroom can be expected to be occupied and the extent to which the available seats are occupied when the rooms are in use; and, (2) the amount of space required to provide one seat in a classroom--including related service areas.

Utilization Standard

A classroom utilization standard employed by a number of states calls for an average weekly room period use of 30 hours per week with 2/3 of the student stations occupied when the rooms are in use. Experience has shown that an average of between 15 and 16 square feet of space are required for one student station in a general classroom. It should be obvious that an institution which schedules its classrooms an average of more than 30 hours per week will be able to meet this standard even though less than 2/3 of the stations are in use. The same effect can also be obtained by reducing the scheduled number of hours and increasing the proportion of the available student stations occupied.

Experience gained over the past four years and reflected in Guiding Principle 4 suggests that those institutions with more limited student enrollment will have fewer options in relation to the scheduling of classes and should not, therefore, be expected to maintain an average room-period use as high as that adopted for the larger institutions.

The classroom standard has, therefore, been modified as follows: Institutions with a projected enrollment of less than 1,000 are expected to use their classrooms an average of 27 hours a week. Institutions with a projected enrollment of 1,000-3,000 students will be expected to use their classrooms an average of 28.5 hours per week. Institutions with a projected enrollment of more than 3,000 students will be expected to use their classrooms an average of 30 hours per week. In all other respects, the utilization standard for general classrooms is the same for all institutions.

Classroom Space Factor

In order to provide a more useful measuring stick and to facilitate comparisons between and among institutions with regard to the level of utilization of various types of facilities, a growing number of states and institutions are adopting the practice of converting the various elements of the utilization standards into a single statistic known as a "space factor."

The classroom space factor is derived by multiplying the number of hours the average room is expected to be in use by the percentage of the student stations which are expected to be in use during those hours. For example, if the average classroom is used 30 hours per week and 2/3 of the student stations are in use during those 30 hours, the average student station will be used 20 hours per week. By dividing the number of hours (20) that the average student station is expected to be used into the number of square feet required for each student station (16), the amount of square feet required for each hour of use of a student station will be .80. This resulting space factor means that .80 square feet of classroom space will be required for each weekly student-clock-hour of classroom instruction. By using the same method of calculation, the space factor for an institution which is expected to use its classrooms an average of 28.5 hours per week will be .84, and for an institution which is expected to use its classrooms an average of 27 hours per week, the space factor will be .89.

Classroom Utilization

Columns (1) and (2) of Table 2.1 report the total and net permanent amount of general classroom space available as of the Fall semester 1967 at each institution in The Oklahoma State System of Higher Education.

TABLE 2.1

GENERAL CLASSROOM RATIOS
THE OKLAHOMA STATE SYSTEM OF HIGHER EDUCATION[a]
FALL SEMESTER 1967

Institution	Total Space Available[b]	Net Permanent Space[b]	WSCH 1967	Ratio of Total Space to WSCH	Ratio of Net Permanent Space to WSCH
	(1)	(2)	(3)	(4)	(5)
OU	156,408	143,202	176,181	.89	.81
OSU	163,658	144,285	201,916	.81	.72
CSC	62,191	33,817	92,551	.67	.37
ECSC	36,315	33,313	32,897	1.10	1.01
NESC	51,398	50,694	68,387	.75	.74
NWSC	39,804	26,694	27,985	1.42	.95
SESC	27,429	17,376	22,497	1.22	.77
SWSC	41,542	41,542	50,674	.82	.82
Cameron	22,875	20,939	23,967	.95	.87
Langston	23,869	3,163	15,451	1.54	.21
OCLA	28,100	28,100	12,997	2.16	2.16
Panhandle	30,830	24,132	14,166	2.18	1.70
Connors	11,557	8,200	6,516	1.77	1.26
Eastern	18,230	13,493	11,774	1.55	1.15
Murray	14,916	14,916	8,120	1.84	1.84
NEOAMC	31,655	14,629	17,556	1.80	.83
NOC	16,631	5,661	10,367	1.60	.55
OMA	23,820	18,000	7,670	3.11	2.35
TOTALS	801,228	642,156	801,672	1.00	.80

[a] Excludes School of Medicine, School of Nursing, and technical schools at Okmulgee and Oklahoma City.
[b] In Assignable Square Feet

Column (3) summarizes the number of weekly student-clock-hours produced in classrooms at each institution during this same semester. By dividing the figures in Column (3)

into the amount of space available, as shown in Columns (1) and (2), a series of ratios are derived, which, when compared with the space factors, will give a meaningful picture of the comparative adequacy of the general classroom space available at each institution in relation to the instructional load of that institution. If the actual ratio is larger than the space factor, the level of utilization is below the expected level. In like manner, if the actual ratio is smaller than the space factor adopted, the level of utilization is better than the expected level.

Space Needed 1967

Table 2.2 presents an analysis of the classroom space needs of each institution as of the Fall semester 1967. The percentages shown in Columns (4) and (5) are based on a comparison of the space currently available with the space which would have been needed if the classroom space standards were met.

Projected Space Needs

Based on the rate of increase which the 1975 enrollment figures represent over the actual enrollment for the Fall semester 1967, the instructional load in terms of weekly student-clock-hours expected to be produced in classrooms has been projected to 1975 and shown in Column (1) of Table 2.3. By multiplying the weekly student-clock-hours shown in Column (1) by the pertinent

TABLE 2.2

GENERAL CLASSROOM SPACE NEEDED
THE OKLAHOMA STATE SYSTEM OF HIGHER EDUCATION[a]
FALL SEMESTER 1967

Institution	Total Space Available[b]	Net Permanent Space[b]	Space Needed[b]	Total Space Available As % Of Space Needed	Net Permanent Space As % Of Space Needed
	(1)	(2)	(3)	(4)	(5)
OU	156,408	143,202	140,945	111.0%	101.6%
OSU	163,658	144,285	161,533	101.3	89.3
CSC	62,191	33,817	74,041	84.0	45.7
ECSC	36,315	33,313	27,633	131.4	120.6
NESC	51,398	50,694	54,710	93.9	92.7
NWSC	39,804	26,694	23,507	169.3	113.6
SESC	27,429	17,376	18,897	145.1	91.9
SWSC	41,542	41,542	40,539	102.5	102.5
Cameron	22,875	20,939	20,132	113.6	104.0
Langston	23,869	3,163	12,979	183.9	24.4
OCLA	28,100	28,100	10,917	257.4	257.4
Panhandle	30,830	24,132	11,899	259.1	202.8
Connors	11,557	8,200	5,473	211.2	149.8
Eastern	18,230	13,493	9,890	184.3	136.4
Murray	14,916	14,916	6,821	218.7	218.7
NEOAMC	31,655	14,629	14,747	214.6	99.2
NOC	16,631	5,661	8,708	191.0	65.0
OMA	23,820	18,000	6,443	369.7	279.4
TOTALS	801,228	642,156	649,814	123.3%	98.8%

[a] Excludes School of Medicine, School of Nursing, and technical schools at Okmulgee and Oklahoma City.
[b] In Assignable Square Feet

space factor shown in Column (2), the total amount of general classroom space needed by 1975 is derived. These figures are shown in Column (3). The amount of additional space needed as shown in Column (4) represents the difference between the total space needs and the amount of net permanent space currently available.

The amount of space under construction or for which funds have previously been provided are shown in Column (5). In view of the fact that a number of buildings were undergoing renovation, rehabilitation, or

TABLE 2.3

GENERAL CLASSROOM SPACE NEEDS
THE OKLAHOMA STATE SYSTEM OF HIGHER EDUCATION[a]
PROJECTED TO 1975

Institution	WSCH Projected to 1975	Space Factor	Total Space Needs Projected to 1975[b]	Additional Space Needed[b]	Space Under Construction[b]	Net Additional Space For Which Funds Are Needed[b]
	(1)	(2)	(3)	(4)	(5)	(6)
OU	266,738	.80	213,391	70,189	78,218	. .
OSU	289,548	.80	231,638	87,353	40,047	47,306
CSC	154,560	.80	123,648	89,831	55,697	34,134
ECSC	49,378	.80	39,503	6,190	17,247	. .
NESC	118,378	.80	94,703	44,009	32,676	11,333
NWSC	48,498	.80	38,798	12,104	22,682	. .
SESC	34,803	.84	29,235	11,859	24,665	. .
SWSC	77,582	.80	62,066	20,524	22,980	. .
Cameron	63,489	.80	50,792	29,853	6,262	23,591
Langston	26,545	.84	22,298	19,135	23,802	. .
OCLA	41,591	.80	33,273	5,173	. .	5,173
Panhandle	23,416	.84	19,670	. .	2,975	. .
Connors	13,434	.84	11,285	3,085	1,380	1,705
Eastern	20,393	.84	17,131	3,638	2,886	752
Murray	15,209	.84	12,776	. .	. .	. .
NEOAMC	27,194	.84	22,843	8,214	20,496	. .
NOC	17,126	.84	14,386	8,725	10,958	. .
OMA	13,990	.84	11,752	. .	. .	. .
TOTALS	1,301,872		1,049,188	419,882	362,971	123,994

[a] Excludes School of Medicine, School of Nursing, and technical schools at Okmulgee and Oklahoma City.
[b] In Assignable Square Feet

conversion at the time of the updating of the survey, it was necessary to make an adjustment for these buildings. In most cases, buildings which will be significantly modified by the construction activity were deleted in their entirety from the inventory of net permanent space and included as space under construction. This procedure made it possible for the net effect of the conversion to be taken into consideration. The figures shown in Column (6) of Table 2.3 represent the net amount of additional assignable space for which funds will be needed if the institution is to have the general classroom space which will be required to serve the number of students projected for the institution.

CHAPTER III

CLASS LABORATORY SPACE NEEDS

In general, the procedure followed in projecting class laboratory space needs is the same as that followed for projecting general classroom space needs, with the exception that the amount of space required per student station in a laboratory varies considerably depending upon the subject field for which the laboratory is designed.

Utilization Standard

A class laboratory utilization standard employed by a number of states calls for an average weekly room period use of 24 hours per week with 80% of the student stations occupied when the rooms are in use. The following allowances per student station are based on a review of data obtained from universities in Michigan, California and several other states:

Life Sciences	75 ASF/station
MCPE Sciences	144 ASF/station
Behavioral Sciences	60 ASF/station
Humanities	48 ASF/station
Technical-Vocational:	
Agriculture	75 ASF/station
Apparel	75 ASF/station
Graphic Arts	75 ASF/station
Health	75 ASF/station
Business	38 ASF/station
Construction	96 ASF/station
Engineering	96 ASF/station
Industrial	96 ASF/station
Transportation	96 ASF/station
General	48 ASF/station

Space Factor

Combining the above elements into a space factor is accomplished on the pattern of that used for classrooms. If the average class laboratory is expected to be in use 24 hours per week and 80% of the student stations are in use during those 24 hours, the average student station will be used 19.2 hours per week. The class laboratory space factors are developed for each subject field by dividing the space per student station by 19.2.

If the Space Per Station Is:	The Derived Space Factor Will Be:
38	1.97
48	2.50
60	3.12
75	3.90
96	5.00
144	7.50

Space Needed 1967

Columns (1) and (2) of Table 3.1 report the total and net permanent amount of class laboratory space available as of the Fall semester 1967 at each institution. By application of the class laboratory space factors to the instructional load of each institution as of the Fall semester 1967 the figures shown in Column (3) are developed. Columns (4) and (5) show the total and net permanent class laboratory space as a percent of the total needed for the 1967 Fall semester.

TABLE 3.1

CLASS LABORATORY SPACE AVAILABLE
THE OKLAHOMA STATE SYSTEM OF HIGHER EDUCATION[a]
FALL SEMESTER 1967
(In Assignable Square Feet)

Institution	Total Space Available	Net Permanent Space	Space Needed 1967	Total Space As % Of Space Needed	Net Permanent Space As % Of Space Needed
	(1)	(2)	(3)	(4)	(5)
OU	217,479	208,195	237,685	91.5%	87.6%
OSU	265,352	204,184	250,897	105.8	81.4
CSC	41,672	26,338	64,755	64.4	40.7
ECSC	48,546	39,784	31,625	153.5	125.8
NESC	39,482	39,482	34,945	113.0	113.0
NWSC	35,994	30,253	24,854	144.8	121.7
SESC	31,862	25,284	13,844	230.1	182.6
SWSC	44,537	44,058	81,398	54.7	54.1
Cameron	32,924	17,456	35,673	89.8	48.9
Langston	19,645	. .	10,390	189.1	. .
OCLA	22,708	22,708	7,549	300.8	300.8
Panhandle	31,034	25,594	18,861	164.5	135.7
Connors	14,268	10,740	4,338	328.9	247.6
Eastern	31,973	28,179	30,926	103.4	91.1
Murray	19,883	19,883	10,005	198.7	198.7
NEOAMC	36,678	24,460	37,132	98.8	65.9
NOC	28,394	20,383	11,546	245.9	176.5
OMA	18,822	18,822	15,712	119.8	119.8
TOTALS	980,353	805,803	922,135	106.3%	87.4%

[a]Excludes School of Medicine, School of Nursing, and technical schools at Okmulgee and Oklahoma City.

TABLE 3.2

CLASS LABORATORY SPACE NEEDS
THE OKLAHOMA STATE SYSTEM OF HIGHER EDUCATION[a]
PROJECTED TO 1975
(In Assignable Square Feet)

Institution	Total Space Needs Projected to 1975	Additional Space Needed	Space Under Construction	Net Additional Space For Which Funds Are Needed
	(1)	(2)	(3)	(4)
OU	359,637	151,442	55,183	96,259
OSU	365,769	161,585	101,554	60,031
CSC	107,212	80,874	29,184	51,690
ECSC	46,983	7,199	14,117	. .
NESC	60,230	20,748	8,476	12,272
NWSC	42,210	11,957	6,861	5,096
SESC	21,180	. .	16,850	. .
SWSC	123,441	79,383	20,438	58,945
Cameron	85,740	68,284	15,640	52,644
Langston	17,732	17,732	16,328	1,404
OCLA	24,167	1,459	. .	1,459
Panhandle	31,064	5,470	1,545	3,925
Connors	8,947	. .	1,500	. .
Eastern	53,570	25,391	12,997	12,394
Murray	18,743	. .	. .	. .
NEOAMC	53,243	28,783	15,265	13,518
NOC	19,077	. .	10,687	. .
OMA	28,662	9,840	. .	9,840
TOTALS	1,467,607	670,147	326,625	379,477

[a]Excludes School of Medicine, School of Nursing, and technical schools at Okmulgee and Oklahoma City.

Projected Space Needs

Column (1) of Table 3.2 presents a summary of the total class laboratory space which will be needed at each institution when the enrollment reaches the level projected for 1975. A more detailed breakdown of the application of the space factors to the projected number of weekly student-clock-hours by subject field is presented in Table 3.3. The amount of additional space needed, as shown in Column (2) of Table 3.2, represents the difference between the total needs and the amount of net permanent space currently available.

The amount of space under construction or for which funds have been previously provided is shown in Column (3). By deducting these figures from the figures shown in Column (2), the net amount of additional assignable class laboratory space needed by 1975 is derived. As shown in Column (4) a total of 379,477 assignable square feet of class laboratory space will need to be constructed by 1975.

TABLE 3.3

DATA USED IN PROJECTING CLASS LABORATORY SPACE NEEDS
THE OKLAHOMA STATE SYSTEM OF HIGHER EDUCATION

Subject Field	WSCH Projected to 1975	Space Factor	Total Space Needs
OU			
Life Sciences	14,692	3.90	57,299
MCPE Sciences	30,195	7.50	226,463
Behavioral Sciences	91	3.12	284
Humanities	8,765	2.50	21,913
Professions	20,050	2.50	50,125
General	1,421	2.50	3,553
			359,637
OSU			
Life Sciences	19,970	3.90	77,883
MCPE Sciences	25,727	7.50	192,952
Behavioral Sciences	1,478	3.12	4,611
Humanities	11,019	2.50	27,548
Professions	17,113	2.50	42,782
Technical-Vocational			
Category I	132	3.90	515
Category II	287	1.97	565
Category III	3,104	5.00	15,520
General	1,357	2.50	3,393
			365,769
CSC			
Life Sciences	7,318	3.90	28,541
MCPE Sciences	4,840	7.50	36,300
Humanities	6,268	2.50	15,670
Professions	5,476	2.50	13,690
Technical-Vocational			
Category II	2,602	5.00	13,011
			107,212
ECSC			
Life Sciences	1,558	3.90	6,077
MCPE Sciences	1,363	7.50	10,223
Behavioral Sciences	441	3.12	1,376
Humanities	2,366	2.50	5,916
Professions	2,768	2.50	6,696
Technical-Vocational			
Category III	3,339	5.00	16,695
			46,983

Subject Field	WSCH Projected to 1975	Space Factor	Total Space Needs
NESC			
Life Sciences	2,529	3.90	9,864
MCPE Sciences	2,616	7.50	19,620
Behavioral Sciences	438	3.12	1,367
Humanities	4,047	2.50	10,118
Professions	4,675	2.50	11,688
Technical-Vocational			
Category III	1,129	5.00	5,645
General	771	2.50	1,928
			60,230
NWSC			
Life Sciences	3,137	3.90	12,234
MCPE Sciences	1,885	7.50	14,138
Humanities	1,520	2.50	3,800
Professions	2,314	2.50	5,785
Technical-Vocational			
Category III	1,147	5.00	5,735
General	207	2.50	518
			42,210
SESC			
MCPE Sciences	758	7.50	5,686
Behavioral Sciences	608	3.12	1,897
Humanities	1,072	2.50	2,680
Professions	1,886	2.50	4,715
Technical-Vocational			
Category III	1,211	5.00	6,056
General	58	2.50	146
			21,180
SWSC			
Life Sciences	5,793	3.90	22,593
MCPE Sciences	7,768	7.50	58,260
Humanities	1,583	2.50	3,958
Professions	8,788	2.50	21,970
Technical-Vocational			
Category III	3,332	5.00	16,660
			123,441

TABLE 3.3--Continued

Subject Field	WSCH Projected to 1975	Space Factor	Total Space Needs
Cameron			
Life Sciences	6,464	3.90	25,210
MCPE Sciences	3,038	7.50	22,785
Behavioral Sciences	1,629	3.12	5,083
Humanities	1,245	2.50	3,113
Professions	6,567	2.50	16,418
Technical-Vocational			
Category I	378	3.90	1,475
Category II	2,218	5.00	11,090
General	226	2.50	566
			85,740
Langston			
Life Sciences	605	3.90	2,359
MCPE Sciences	509	7.50	3,818
Humanities	2,180	2.50	5,450
Professions	210	2.50	525
Technical-Vocational			
Category III	1,116	5.00	5,580
			17,732
OCLA			
Life Sciences	832	3.90	3,245
MCPE Sciences	868	7.50	6,510
Humanities	3,450	2.50	8,626
Professions	2,314	2.50	5,786
			24,167
Panhandle			
Life Sciences	2,451	3.90	9,559
MCPE Sciences	1,394	7.50	10,455
Humanities	448	2.50	1,121
Professions	2,579	2.50	6,448
Technical-Vocational			
Category III	425	5.00	2,125
General	542	2.50	1,356
			31,064
Connors			
Life Sciences	384	3.90	1,498
Behavioral Sciences	625	3.12	1,950
Humanities	1,010	2.50	2,525
Professions	821	2.50	2,052
General	369	2.50	922
			8,947

Subject Field	WSCH Projected to 1975	Space Factor	Total Space Needs
Eastern			
Life Sciences	2,475	3.90	9,653
MCPE Sciences	2,659	7.50	19,943
Humanities	352	2.50	880
Professions	757	2.50	1,893
Technical-Vocational			
Category III	4,240	5.00	21,201
			53,570
Murray			
MCPE Sciences	1,068	7.50	8,010
Behavioral Sciences	614	3.12	1,916
Humanities	270	2.50	675
Professions	472	2.50	1,180
Technical-Vocational			
Category I	504	3.90	1,966
Category II	1,191	1.97	2,346
Category III	530	5.00	2,650
			18,743
NEOAMC			
Life Sciences	1,708	3.90	6,661
MCPE Sciences	2,279	7.50	17,092
Behavioral Sciences	1,293	3.12	4,034
Humanities	526	2.50	1,315
Professions	764	2.50	1,910
Technical-Vocational			
Category II	2,224	1.97	4,381
Category III	3,553	5.00	17,765
General	34	2.50	85
			53,243
NOC			
Life Sciences	758	3.90	2,957
MCPE Sciences	905	7.50	6,788
Humanities	555	2.50	1,388
Professions	1,305	2.50	3,263
Technical-Vocational			
Category I	96	3.90	375
Category III	861	5.00	4,306
			19,077
OMA			
Life Sciences	1,797	3.90	7,008
MCPE Sciences	2,271	7.50	17,032
Humanities	1,222	2.50	3,055
Technical-Vocational			
Category II	181	1.97	357
Category III	192	5.00	960
General	100	2.50	250
			28,662

CHAPTER IV

FACULTY OFFICE SPACE NEEDS

The amount of faculty office space needed by an institution of higher education is determined by the number of faculty members to be housed and the average office size provided. The number of faculty members can in turn be related to the number of students to be served. In developing a space factor for faculty offices, the following assumptions have been made:

Student-Faculty Ratios:

25 lower-division undergraduate FTE students per FTE faculty
18 upper-division undergraduate FTE students per FTE faculty
10.5 graduate level FTE students per FTE faculty

Average Office Size:

126 square feet

Space Factor

Combining these assumptions results in an allowance of 5 square feet per lower-division undergraduate FTE student, 7 square feet per upper-division undergraduate FTE student, and 12 square feet per graduate level FTE student. In addition, an allowance of 25% is considered necessary to provide for related service areas such as secretarial-clerical offices, work rooms, store rooms, etc.

Space Needed 1967

Columns (1) and (2) of Table 4.1 report the total and net permanent amount of faculty office space available as of the 1967 Fall semester at each institution. Column (3) of this table shows the amount of faculty office space which the forumla would provide based on current enrollment levels.

TABLE 4.1

FACULTY OFFICE SPACE AVAILABLE
THE OKLAHOMA STATE SYSTEM OF HIGHER EDUCATION[a]
FALL SEMESTER 1967

Institution	Total Space Available[b]	Net Permanent Space[b]	Space Needed[b]	Total Space Available As % Of Space Needed	Net Permanent Space Available As % Of Space Needed
	(1)	(2)	(3)	(4)	(5)
OU	164,543	149,590	131,455	125.2%	113.8%
OSU	188,230	151,140	127,106	148.1	118.9
CSC	36,793	22,565	55,388	66.4	40.7
ECSC	11,654	10,341	19,772	58.9	52.3
NESC	31,041	31,041	39,355	78.9	78.9
NWSC	12,071	9,045	17,064	70.7	53.0
SESC	12,862	8,666	14,727	87.3	58.8
SWSC	19,619	19,542	32,615	60.2	59.9
Cameron	10,557	9,019	13,825	76.4	65.2
Langston	9,924	2,003	10,224	97.1	19.6
OCLA	10,649	10,649	6,840	155.7	155.7
Panhandle	11,538	9,516	8,772	131.5	108.5
Connors	4,199	3,523	3,637	115.4	96.9
Eastern	7,671	6,494	7,123	107.7	91.1
Murray	7,062	7,062	4,506	156.7	156.7
NEOAMC	13,443	7,028	12,912	104.1	54.4
NOC	6,399	3,691	5,956	107.4	62.0
OMA	4,595	3,605	4,556	100.9	79.1
TOTALS	562,850	464,520	515,835	109.1%	90.1%

[a] Excludes School of Medicine, School of Nursing, and technical Schools at Okmulgee and Oklahoma City.
[b] In Assignable Square Feet

By dividing the figures in Columns (1) and (2) by the figures in Column (3), the percentages shown in Columns (4) and (5) are derived. These percentages represent the relative degree to which the space currently available is adequate to serve the current enrollment at each institution. A note of caution should be sounded regarding the interpretation of this data. Existing offices may be larger than the size recommended, yet not large enough to accomodate more than one faculty member. To redesign existing buildings along the recommended lines would not, in most cases, be economically feasible.

Projected Space Needs

Column (1) of Table 4.2 summarizes the faculty office space needs of each institution based on the enrollment levels projected for 1975. The step-by-step application of the faculty office space factor is illustrated in Table 4.3.

After adjustments are made for space currently available and space under construction, the net additional space for which funds are needed is shown in Column (4) of Table 4.2.

TABLE 4.2

FACULTY OFFICE SPACE NEEDS
THE OKLAHOMA STATE SYSTEM OF HIGHER EDUCATION[a]
PROJECTED TO 1975
(In Assignable Square Feet)

Institution	Space Needs Projected to 1975[b]	Additional Space Needed	Space Under Construction	Net Additional Space For Which Funds Are Needed
	(1)	(2)	(3)	(4)
OU	206,906	57,316	81,494	. .
OSU	189,060	37,920	63,979	. .
CSC	95,313	72,748	40,642	32,106
ECSC	30,986	20,645	11,751	8,894
NESC	69,150	38,109	7,408	30,701
NWSC	30,868	21,823	7,761	14,062
SESC	23,600	14,934	12,099	2,835
SWSC	50,836	31,294	9,347	21,947
Cameron	42,485	33,466	12,431	21,035
Langston	17,640	15,637	10,741	4,896
OCLA	22,200	11,551	. .	11,551
Panhandle	14,600	5,084	. .	5,084
Connors	7,500	3,977	630	3,347
Eastern	12,344	5,850	3,059	2,791
Murray	8,438	1,376	544	832
NEOAMC	20,000	12,972	7,775	5,197
NOC	9,844	6,153	3,713	2,440
OMA	8,312	4,707	. .	4,707
TOTALS	860,082	395,562	273,374	172,425

[a] Excludes School of Medicine, School of Nursing, and technical schools at Okmulgee and Oklahoma City.
[b] See Taole 4.3 for analysis of the basis for this data

TABLE 4.3

DATA USED IN PROJECTING FACULTY OFFICE SPACE NEEDS
THE OKLAHOMA STATE SYSTEM OF HIGHER EDUCATION[a]
PROJECTED TO 1975

Institution	FTE Lower-Division Undergrad.	Space Factor	Space Needed[b] (1)x(2)	FTE Upper-Division Undergrad.	Space Factor	Space Needed[b] (4)x(5)	FTE Graduate	Space Factor	Space Needed[b] (7)x(8)	Sub-Total[b] (3)+(6)+(9)	Related Service Space[b] .25x(10)	Total Space Needed[b] (10)+(11)
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)
OU	9,485	5.0	47,425	8,300	7.0	58,100	5,000	12.0	60,000	165,525	41,381	206,906
OSU	10,775	5.0	53,875	9,482	7.0	66,374	2,583	12.0	30,996	151,245	37,811	189,056
CSC	6,405	5.0	32,025	5,063	7.0	35,441	732	12.0	8,784	76,250	19,063	95,313
ECSC	2,558	5.0	12,790	1,361	7.0	9,527	206	12.0	2,472	24,789	6,197	30,986
NESC	4,565	5.0	22,825	4,025	7.0	28,175	360	12.0	4,320	55,320	13,830	69,150
NWSC	2,128	5.0	10,640	1,682	7.0	11,774	190	12.0	2,280	24,694	6,174	30,868
SESC	1,545	5.0	7,725	1,333	7.0	9,331	152	12.0	1,824	18,880	4,720	23,600
SWSC	3,423	5.0	17,115	2,950	7.0	20,650	242	12.0	2,904	40,669	10,167	50,836
Cameron	3,516	5.0	17,580	2,344	7.0	16,408	• •	• •	• •	33,988	8,497	42,485
Langston	1,339	5.0	6,695	1,061	7.0	7,427	• •	• •	• •	14,122	3,531	17,653
OCLA	1,620	5.0	8,100	1,380	7.0	9,660	• •	• •	• •	17,760	4,440	22,200
Panhandle	1,160	5.0	5,800	340	7.0	5,880	• •	• •	• •	11,680	2,920	14,600
Connors	1,200	5.0	6,000	• •	• •	• •	• •	• •	• •	6,000	1,500	7,500
Eastern	1,975	5.0	9,875	• •	• •	• •	• •	• •	• •	9,875	2,469	12,344
Murray	1,350	5.0	6,750	• •	• •	• •	• •	• •	• •	6,750	1,688	8,438
NEOAMC	3,200	5.0	16,000	• •	• •	• •	• •	• •	• •	16,000	4,000	20,000
NOC	1,575	5.0	7,875	• •	• •	• •	• •	• •	• •	7,875	1,969	9,844
OMA	1,330	5.0	6,650	• •	• •	• •	• •	• •	• •	6,650	1,663	8,313
TOTALS	59,149	5.0	295,745	39,821	7.0	278,747	9,465	12.0	113,580	688,072	172,020	860,092

[a] Excludes School of Medicine, School of Nursing, and technical schools at Okmulgee and Oklahoma City.
[b] In Assignable Square Feet

CHAPTER V

OTHER INSTRUCTIONAL SPACE NEEDS

This category of space includes all other types of facilities which are directly related to the instructional program of an institution of higher education. Among the facilities included in this category are special class laboratories, which are not normally available for regular assignment of classes; individual study laboratories, such as music practice rooms; audio-visual facilities; radio and television facilities; laboratory schools; armory and physical education facilities; and assembly or auditorium-type facilities.

Because of the diverse nature of the types of space included in this category, it is extremely difficult to develop a space factor appropriate to each institution. It is to be hoped that future research will make possible the development of a series of space factors relating to each type of space included in this category. For the present study, however, it has been necessary to employ a more generalized method of projection in relation to this type of space than in relation to any of the other types of space.

In view of the fact that this category includes such large areas of space as gymnasia and auditoria, the assumption has been made that the need for this type of space will not increase in direct proportion to the enrollment of an institution of higher education. The following standards were, therefore, adopted:

Projected Enrollment	ASF per FTE Student
Less than 1,000	24
1,000 to 3,000	16 (minimum 24,000 ASF)
More than 3,000	14 (minimum 48,000 ASF)

Space Available 1967

Columns (1) and (2) of Table 5.1 show the total amount and net permanent amount of other instructional space available at each institution as of the Fall semester 1967. Dividing these figures by the 1967 enrollment figures shown in Column (3) produces the figures shown in Columns (4) and (5).

Projected Space Needs

The amount of other instructional space which will be needed when the 1975 enroll-

TABLE 5.1

OTHER INSTRUCTIONAL SPACE AVAILABLE
THE OKLAHOMA STATE SYSTEM OF HIGHER EDUCATION*
FALL SEMESTER 1967
(In Assignable Square Feet)

Institution	Total Space Available	Net Permanent Space	Total Space Per FTE Student	Net Permanent Space Per FTE Student
	(1)	(2)	(3)	(4)
OU	191,867	173,084	12.84	11.58
OSU	169,836	112,615	10.84	7.19
CSC	79,161	75,736	10.87	10.40
ECSC	41,875	40,257	15.34	14.75
NESC	49,726	47,178	9.63	9.14
NWSC	47,956	45,836	20.85	19.93
SESC	61,925	52,604	31.79	27.00
SWSC	46,294	46,294	10.73	10.73
Cameron	24,215	24,215	10.95	10.95
Langston	44,525	30,959	31.87	22.16
OCLA	48,955	48,955	52.19	52.19
Panhandle	46,775	46,775	38.66	38.66
Connors	42,047	31,165	72.25	53.55
Eastern	22,010	22,010	19.31	19.31
Murray	17,854	17,854	24.76	24.76
NEOAMC	24,932	15,767	12.07	7.63
NOC	40,051	35,936	42.03	37.71
OMA	38,489	36,438	52.80	49.98
TOTALS	1,038,493	903,678	15.67	13.64

*Excludes School of Medicine, School of Nursing, and technical schools at Okmulgee and Oklahoma City.

ment levels are reached is shown in Column (3) of Table 5.2.These figures are derived by multiplying the projected enrollment figures by the space factors shown in Column (2). After adjusting the figures in Column (3) to allow for the amount of net permanent space available, the amount of additional space which will be needed in order to provide the recommended amount of space for each institution is shown in Column (4). Column (5) reports the amount of space under construction at the present time or for which funds have been previously provided. As was the case with reference to other types of space, this column includes space in buildings which are undergoing major renovation or alteration, so as to take into consideration the net effect of such alteration.

The amount of space shown in Column (6) is, therefore, the net amount of additional space for which funds are needed at the present time in order to provide for the minimum needs of each institution for other instructional space,when the institutional enrollment reaches the level projected for 1975.

TABLE 5.2

OTHER INSTRUCTIONAL SPACE NEEDS
THE OKLAHOMA STATE SYSTEM OF HIGHER EDUCATION[a]
PROJECTED TO 1975

Institution	FTE Students Projected for 1975	Space Factor	Total Space Needs Projected to 1975[b]	Additional Space Needed[b]	Space Under Construction[b]	Net Additional Space For Which Funds Are Needed[b]
	(1)	(2)	(3)	(4)	(5)	(6)
OU	22,785	14	318,990	145,906	24,882	121,024
OSU	22,840	14	319,760	207,145	156,147	50,998
CSC	12,200	14	170,800	95,064	41,417	53,647
ECSC	4,126	14	57,750	17,493	28,002	• •
NESC	8,950	14	125,300	78,122	6,995	71,127
NWSC	4,000	14	56,000	10,146	11,046	• •
SESC	3,030	14	48,000		2,351	• •
SWSC	6,615	14	92,610	46,316	16,096	30,220
Cameron	5,860	14	82,040	57,825	13,788	44,037
Langston	2,400	16	38,400	7,441	26,960	• •
OCLA	3,000	16	48,000	• •	• •	• •
Panhandle	2,000	16	32,000	• •	• •	• •
Connors	1,200	16	24,000	-0-	• •	• •
Eastern	1,975	16	31,600	9,590	5,050	4,540
Murray	1,350	16	24,000	6,146	17,515	• •
NEOAMC	3,200	14	48,000	32,233	38,918	• •
NOC	1,575	16	25,200	• •	4,183	• •
OMA	1,330	16	24,000	• •	• •	• •
TOTALS	108,436		1,566,450	713,427	393,350	375,593

[a] Excludes School of Medicine, School of Nursing, and technical schools at Okmulgee and Oklahoma City.
[b] In Assignable Square Feet

CHAPTER VI

LIBRARY SPACE NEEDS

The 1963 survey of physical facilities at Oklahoma institutions of higher education revealed a critical need for the expansion of library space at most institutions. As a result of the emphasis upon this type of space in the first phase of the capital improvements program, a major step has been taken toward relieving this crisis.

In determining the library space needs of an institution of higher education, three types of space must be considered:

1. The amount of space needed to provide reading and study areas for students and faculty;
2. Stack space for storage of the institution's holdings of books, periodicals, and other types of library materials; and
3. Space for processing and servicing of library facilities.

In view of the prospects for revolutionary changes in the role of the library in an institution of higher education resulting from the rapid rise of educational technology with reference to information storage and retrieval, it is anticipated that in the future special attention will need to be given to the development of new methods for projecting library space needs.

Space Standard

For the purpose of the present study, a modified version of the American Library Association standards has been used as follows:

Reader Space[1]	5.00 ASF per FTE lower division undergraduate student 6.25 ASF per FTE upper division undergraduate 7.50 ASF per FTE graduate student

[1] These allowances would provide 25 square feet of library space per student for 20 percent of the lower-division undergraduate students, 25 percent of the upper-division undergraduate students, and 30 percent of the graduate students.

Stack Space[1] .0667 ASF per volume

The basis for computing the number of library volumes which an institution should expect to house is as follows:

OU	1,600,000 volumes (by 1975)
OSU	1,300,000 volumes (by 1975)
4-Year Colleges	50,000 volumes for the first 600 students plus 10,000 volumes for each additional 500 students or fraction thereof
2-Year Colleges	20,000 volumes for the first 1,000 students plus 5,000 volumes for each additional 500 students or fraction thereof

Related Service Space 25% of the sum of reader and stack space

TABLE 6.1

LIBRARY SPACE NEEDED
THE OKLAHOMA STATE SYSTEM OF HIGHER EDUCATION[a]
FALL SEMESTER 1967

Institution	Total Space Available[b]	Net Permanent Space[b]	Space Needed 1967[b]	Total Space As % Of Space Needed	Net Permanent Space As % Of Space Needed
	(1)	(2)	(3)	(4)	(5)
OU	185,197	184,517	202,381	91.5%	91.2%
OSU	179,835	178,695	188,366	95.5	94.9
CSC	23,511	. .	83,469	28.1	. .
ECSC	23,185	23,185	31,989	72.5	72.5
NESC	18,838	18,838	59,660	31.6	31.6
NWSC	20,007	20,007	27,566	72.6	72.6
SESC	. .	. .	23,668	. .	. .
SWSC	9,442	. .	48,524	19.5	. .
Cameron	12,207	12,207	16,742	72.9	72.9
Langston	16,684	16,684	17,168	97.2	97.2
OCLA	18,689	18,689	12,310	151.8	151.8
Panhandle	9,930	9,930	15,822	62.8	62.8
Connors	5,130	. .	5,305	96.7	. .
Eastern	4,780	. .	9,210	51.9	. .
Murray	4,814	4,814	6,174	78.0	78.0
NEOAMC	22,571	20,136	14,997	150.5	150.5
NOC	7,608	7,608	7,624	99.8	99.8
OMA	5,622	5,622	6,224	90.3	90.3
TOTALS	568,050	520,932	777,199	73.1%	67.0%

[a]Excludes School of Medicine, School of Nursing, and technical schools at Okmulgee and Oklahoma City.
[b]In Assignable Square Feet

Space Needed 1967

The total and net permanent amount of library space available as of the 1967 Fall semester at each institution is shown in Columns (1) and (2) of Table 6.1. By applying the library space formula to the 1967 enrollment at each institution the amount of space required to serve the current enrollment is derived as shown in Column (3) of Table 6.1. By dividing the figures in Column (3) into the amount of library space available as shown in Columns (1) and (2) of this table, the ratios shown in Columns (4) and (5) are derived.

[1]This allowance would provide one square foot of stack space for each 15 volumes to be housed in the library.

Projected Space Needs

Using the projected enrollment figures for 1975, the total library space needs for each institution have been projected and are shown in Column (1) of Table 6.2. A detailed breakdown of the application of the library space standard is presented in Table 6.3. Column (2) of Table 6.2 shows the amount of additional space needed in addition to the amount of net permanent space which is presently available in order to provide the recommended amount of library space.

TABLE 6.2

LIBRARY SPACE NEEDS
THE OKLAHOMA STATE SYSTEM OF HIGHER EDUCATION[a]
PROJECTED TO 1975
(In Assignable Square Feet)

Institution	Total Space Needs Projected to 1975	Additional Space Needed	Space Under Construction	Net Additional Space Needed According to Formula	Space For Which Funds Are Needed
	(1)	(2)	(3)	(4)	(5)
OU	304,333	119,816	5,605	114,211	114,211
OSU	273,971	95,276	4,340	90,936	90,936
CSC	138,975	138,975	78,549	60,426	. .
ECSC	47,728	24,543	. .	24,543	24,543
NESC	102,538	83,700	89,619	. .	. .
NWSC	45,730	25,723	12,170	13,553	. .
SESC	36,502	36,502	32,428	4,074	. .
SWSC	76,724	76,724	43,622	33,102	. .
Cameron	66,968	54,761	936	53,825	. .
Langston	29,150	12,466	8,822	3,644	3,644
OCLA	35,080	16,391	. .	16,391	16,391
Panhandle	23,812	13,882	13,011	871	. .
Connors	9,583	9,583	7,489	2,094	2,094
Eastern	14,845	14,845	16,413	. .	. .
Murray	10,521	5,707	5,426	281	281
NEOAMC	23,750	3,614	. .	3,614	. .
NOC	12,344	4,736	. .	4,736	4,736
OMA	10,062	4,440	. .	4,440	4,440
TOTALS	1,262,616	741,684	318,430	430,741	261,276

[a]Excludes School of Medicine, School of Nursing, and technical schools at Okmulgee and Oklahoma City.

The figures shown in Column (3) represent the amount of library space currently under construction or for which funds have been provided, including the amount of library space which will result from alteration or conversion of existing buildings. When this space is deducted from the space shown in Column (2), the amount of net space needed according to the formula is shown in Column (4).

Adjusted Need

In consideration of the fact that recent construction has provided considerably more library space than is needed to house the current library holdings of a number of institutions, institutions which have recently completed, or expect to complete in Phase One, a major library addition, will be approved for a library project in Phase Two only on the presentation of satisfactory evidence that the actual library holdings by 1970 will equal or exceed the number of volumes projected for the institution according to the library space standard. On the basis of this policy the net amount of additional library space for which funds will be needed is shown in Column (5).

TABLE 6.3

DATA USED IN PROJECTING LIBRARY SPACE NEEDS
THE OKLAHOMA STATE SYSTEM OF HIGHER EDUCATION[a]
PROJECTED TO 1975

Institution	FTE Lower-Division Undergrad.	Space Factor	Space Needed[b] (1)x(2)	FTE Upper-Division Undergrad.	Space Factor	Space Needed[b] (4)x(5)	FTE Graduates	Space Factor	Space Needed[b] (7)x(8)	Volumes to be Housed	Space Factor	Space Needed[b] (10)x(11)	Sub-Total[b] (3)+(6)+(9)+(12)	Related Service Space[b] (13)x.25	Total[b] (13)+(14)
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)
OU	9,485	5.0	47,425	8,300	6.25	51,875	5,000	7.50	37,500	1,600,000	.0667	106,720	243,520	60,880	304,400
OSU	10,775	5.0	53,875	9,482	6.25	59,263	2,583	7.50	19,373	1,300,000	.0667	86,710	219,221	54,805	274,026
CSC	6,405	5.0	32,025	5,063	6.25	31,644	732	7.50	5,490	630,000	.0667	42,021	111,180	27,795	138,975
ECSC	2,558	5.0	12,790	1,361	6.25	8,506	206	7.50	1,545	230,000	.0667	15,341	38,182	9,546	47,728
NESC	4,565	5.0	22,825	4,025	6.25	25,156	360	7.50	2,700	470,000	.0667	31,349	82,030	20,508	102,538
NWSC	2,128	5.0	10,640	1,682	6.25	10,513	190	7.50	1,425	210,000	.0667	14,007	36,585	9,146	45,731
SESC	1,545	5.0	7,725	1,333	6.25	8,331	152	7.50	1,140	180,000	.0667	12,006	29,202	7,301	36,503
SWSC	3,423	5.0	17,115	2,950	6.25	18,438	242	7.50	1,815	360,000	.0667	24,012	61,380	15,345	76,725
Cameron	3,516	5.0	17,580	2,344	6.25	14,650	. .	. .	. .	320,000	.0667	21,344	53,574	13,394	66,968
Langston	1,339	5.0	6,695	1,061	6.25	6,631	. .	. .	. .	150,000	.0667	10,005	23,331	5,833	29,164
OCLA	1,620	5.0	8,100	1,380	6.25	8,625	. .	. .	. .	170,000	.0667	11,339	28,064	7,016	35,080
Panhandle	1,160	5.0	5,800	840	6.25	5,250	. .	. .	. .	120,000	.0667	8,004	19,054	4,764	23,818
Conners	1,200	5.0	6,000	. .	. .	. .	. .	. .	. .	25,000	.0667	1,668	7,668	1,917	9,585
Eastern	1,975	5.0	9,875	. .	. .	. .	. .	. .	. .	30,000	.0667	2,001	11,876	2,969	14,845
Murray	1,350	5.0	6,750	. .	. .	. .	. .	. .	. .	25,000	.0667	1,668	8,418	2,105	10,523
NEOAMC	3,200	5.0	16,000	. .	. .	. .	. .	. .	. .	45,000	.0667	3,002	19,002	4,751	23,753
NOC	1,575	5.0	7,875	. .	. .	. .	. .	. .	. .	30,000	.0667	2,001	9,876	2,469	12,345
OMA	1,330	5.0	6,650	. .	. .	. .	. .	. .	. .	21,000	.0667	1,401	8,051	2,013	10,064
TOTALS	59,149	5.0	295,745	39,821	6.25	248,882	9,465	7.50	70,988	5,916,000	.0667	394,599	1,010,214	252,557	1,262,771

[a] Excludes School of Medicine, School of Nursing, and technical schools at Okmulgee and Oklahoma City.
[b] In Assignable Square Feet

CHAPTER VII

ADMINISTRATIVE SPACE NEEDS

The amount of administrative space required by an institution of higher education is determined by at least two considerations: (1) The size of the student enrollment to be served, and, (2) the nature and complexity of the total institutional program. Although it might seem logical to assume that as student enrollment increases the amount of administrative space per student would decrease, an increase in the complexity of the nature and scope of the total institutional program tends to accompany the increased student enrollment so as to offset any expected administrative efficiencies resulting from the larger enrollment.

Space Standard

Table 7.1 presents an analysis of the amount of administrative space currently available at each institution. The net permanent amount of space shown in Column (2) represents approximately 4.5 assignable square feet per FTE student. In an effort to provide the maximum amount of instructional space, institutions tended to underbuild in the area of administrative space in previous years; therefore, the space standard adopted is 5 square feet of assignable area per FTE student. Column (3) shows the amount of space needed at the present time based on this standard. Columns (4) and (5) indicate the adequacy of existing space relative to the standard.

TABLE 7.1

ADMINISTRATIVE SPACE NEEDED
THE OKLAHOMA STATE SYSTEM OF HIGHER EDUCATION[a]
FALL SEMESTER 1967

Institution	Total Space Available[b]	Net Permanent Space[b]	Space Needed[b]	Total Space As % Of Space Needed	Net Permanent Space As % Of Space Needed
	(1)	(2)	(3)	(4)	(5)
OU	62,254	60,886	74,705	83.3%	81.5%
OSU	109,737	88,848	79,210	138.5	112.1
CSC	19,587	14,556	36,410	53.8	40.0
ECSC	13,312	13,312	13,645	97.6	97.6
NESC	12,465	11,349	25,810	48.3	44.0
NWSC	7,744	5,679	11,500	67.3	49.4
SESC	9,892	7,096	9,740	101.6	72.9
SWSC	5,459	5,459	21,575	25.3	25.3
Cameron	5,383	5,383	11,060	48.7	48.7
Langston	5,571	* *	6,985	79.8	* *
OCLA	8,414	8,414	4,690	179.4	179.4
Panhandle	6,591	6,591	6,050	108.9	108.9
Connors	2,514	2,514	2,910	86.4	86.4
Eastern	5,114	5,114	5,700	89.7	89.7
Murray	4,753	4,753	3,605	131.8	131.8
NEOAMC	6,798	5,077	10,330	65.8	49.1
NOC	5,242	5,242	4,765	110.0	110.0
OMA	10,171	9,211	3,645	279.0	252.7
TOTALS	301,001	259,484	332,335	90.6%	78.1%

[a] Excludes School of Medicine, School of Nursing, and technical schools at Okmulgee and Oklahoma City.

[b] In Assignable Square Feet

Projected Need

Application of this space factor to the full-time-equivalent student enrollment projected for 1975 produces the figure shown in Column (3) of Table 7.2. When these figures are adjusted by the amount of net permanent space currently available, the amount of additional space needed is shown in Column (4) of Table 7.2.

Column (5) presents the amount of administrative space which is currently under construction or for which funds are available. By deducting these amounts from the figures shown in Column (4), the amount of net additional administrative space for which funds are needed may be derived. These figures are shown in Column (6).

TABLE 7.2

ADMINISTRATIVE SPACE NEEDS
THE OKLAHOMA STATE SYSTEM OF HIGHER EDUCATION[a]
PROJECTED TO 1975

Institution	FTE Students Projected for 1975	Space Factor	Total Space Needs Projected to 1975[b]	Additional Space Needed[b]	Space Under Construction[b]	Net Additional Space For Which Funds Are Needed[b]
	(1)	(2)	(3)	(4)	(5)	(6)
OU	22,785	5.0	113,925	53,039	• •	53,039
OSU	22,840	5.0	114,200	25,352	5,844	19,508
CSC	12,200	5.0	61,000	46,444	21,175	25,269
ECSC	4,126	5.0	20,625	7,313	• •	7,313
NESC	8,950	5.0	44,750	33,401	27,235	6,166
NWSC	4,000	5.0	20,000	14,321	3,125	11,196
SESC	3,030	5.0	15,150	8,054	9,184	• •
SWSC	6,615	5.0	33,075	27,616	• •	27,616
Cameron	5,860	5.0	29,300	23,917	14,287	9,630
Langston	2,400	5.0	12,000	12,000	8,017	3,983
OCLA	3,000	5.0	15,000	6,586	• •	6,586
Panhandle	2,000	510	10,000	3,409	• •	3,409
Connors	1,200	5.0	6,000	3,486	• •	3,486
Eastern	1,975	5.0	9,875	4,761	• •	4,761
Murray	1,350	5.0	6,750	1,997	• •	1,997
NEOAMC	3,200	5.0	16,000	10,923	1,041	9,882
NOC	1,575	5.0	7,875	2,633	• •	2,633
OMA	1,330	5.0	6,650	• •	• •	• •
TOTALS	108,436	5.0	542,175	285,252	89,908	196,474

[a] Excludes School of Medicine, School of Nursing, and technical schools at Okmulgee and Oklahoma City.

[b] In Assignable Square Feet

CHAPTER VIII

RESEARCH FACILITIES

Although research has long been accepted as a basic function of higher education, especially at the university-type institution, it has only been in recent years that substantial amounts of money have been available to support this function. A recent report of the Bureau of the Budget noted that "university research funds have increased from about $15 million in 1940 to approximately $1.3 billion for fiscal 1966."[1]

This sudden infusion of project-oriented research funds has not been entirely an unmixed blessing for higher education. Basic issues, such as the balance between research and teaching and between the sciences and the humanities, are raised. Other university problems range from faculty-administration relationships in planning of new research programs to the development of the more sophisticated business systems required to handle Federal funds.[2]

Basic Policy Considerations

From the standpoint of State-level planning in the area of physical facilities this rapid expansion of Federal funds to support the research function has created perplexing problems. Basic policy considerations are involved for which answers have yet to be developed. What is the proper relationships between instruction and research? How many research personnel should a university expect to have engaged in research at any given time? In what subject fields or disciplines should research be conducted?What types of research projects are appropriate? Where will the operating funds be secured for the support of research?

In the absence of satisfactory answers to these questions,the task of projecting the need for research facilities is virtually impossible. Over the past two years members of the State Regents' staff have been

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[1] The Administration of Government Supported Research at Universities, March, 1966.

[2] Ibid.

in contact with planning officers at universities and State coordinating boards in Illinois, Indiana, Wisconsin, Michigan, New York, California, and Texas in an effort to develop an approach to this problem. In some cases, considerable progress has been made regarding the internal allocation of available research facilities at a single institution. However, techniques appropriate to the determination of needs on a state-wide basis await additional study.

On two occasions this problem was discussed with the State Regents' Technical Advisory Committee on Facilities Planning. The consensus of the Committee was that considerably more study is needed in this area. Planning officers at the University of Oklahoma and Oklahoma State University were encouraged to develop as much data as possible relative to this need with a view toward the eventual formulation of sound projection techniques.

Approaches to the Problem

A tentative approach, patterned somewhat along the lines of an emerging methodology developed by Dr. Harlan Bareither at the University of Illinois, was presented by Oklahoma State University. Apart from resolution of the policy questions regarding the relative emphasis on teaching and research, the proposal of OSU, that facilities be provided for approximately the same number of FTE research personnel as teaching personnel, could not be accepted as a final solution.[1]

The OSU proposal, along with data which is expected in the near future from the University of Oklahoma,[2] will be given serious consideration as efforts proceed toward the formulation of an approach to this problem. The eventual solution may be found to lie in the area of project-oriented allocation of funds for research facilities rather than by a formula. Until additional data is available, all approaches should be kept open.

In addition, progress is being made in other areas which should make possible the formulation of answers to the policy questions stated above. The Oklahoma Consortium on Research Development, a voluntary association of 30 Oklahoma institutions of higher education, is presently engaged in a comprehensive inventory of research per-

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[1] One indication of the relative emphasis assigned to research by public policy is provided by the fact that approximately 7.3% of the educational and general budgets projected for fiscal 1968-69 for the University of Oklahoma and Oklahoma State University is for research.

[2] At the time of the writing of this report, no data has been submitted by the University of Oklahoma for fiscal 1968-69.

sonnel and research activity at institutions of higher education in Oklahoma. The results of this inventory should be of considerable value in determining future space requirements to house the research function.

Although efforts are now being made to develop a rational approach to the projection of research space needs per se, it is appropriate to point out that the function of research is neither separate from nor incidental to the function of instruction. Because of the close relationship between these two functions, a considerable amount of research activity is currently undertaken in facilities designed primarily for instruction. For example, a great deal of research activity is (and will always be) carried out in faculty offices, in instructional laboratories, and in library facilities.

However, the research function does create the need for some specialized types of facilities designed primarily, if not exclusively, for housing research activities. In many cases, these facilities are considerably more expensive than facilities designed for direct instruction.

As of the Fall semester, 1967, the University of Oklahoma and Oklahoma State University had a total of over 600,000 assignable square feet of net permanent space assigned to the research function. Table 8.1 shows the types of rooms included in this category.

TABLE 8.1

RESEARCH SPACE AVAILABLE
FALL SEMESTER 1967
(In Assignable Square Feet)

Institution	Laboratory Facilities	Office Facilities	Other[a]	Total
OU	106,755	15,171	. .	121,926
OSU	295,062	42,714	154,591	492,367
TOTALS	401,817	57,885	154,591	614,293

[a]Includes field service facilities used primarily for the Agricultural Experiment Station.

Caution should be exercised in the interpretation of the date in Table 8.1. The fact that virtually all of these facilities were originally designed for instructional purposes may significantly reduce their usefulness for research. For this reason it would be unwise to treat the existing relationships between research space and research activity as descriptive of what ought to prevail in the future.

A complete review of the inventory of research facilities is currently underway at Oklahoma State University to determine, among other things, the subject fields or disciplines to which this space is assigned. A similar survey will also be needed at the University of Oklahoma.

Funds Currently Available

From the 1965 Building Bond Issue, the State Regents allocated $500,000 to be used as matching funds by the University of Oklahoma and Oklahoma State University for the construction of special research facilities. In view of the availability of Federal funds for the construction of special research facilities should be at east $1 million. Some indication of the priority given the matter of research space by the two universities may be evident in the commitment of these research funds for the construction of research space. To date, OSU has made no commitment regarding the use of these funds set aside for construction of special research facilities at that institution. At the University of Oklahoma, $166,167 of that institution's research funds were added to the development cost of the physical science center for the purpose of obtaining additional space that might be used both for research and instruction. To date, no commitment has been made for $83,333 which remains available for this institution's use as matching funds for the construction of special research facilities.

Proposed Funds

The importance of research, not only in relation to the instructional program of Oklahoma institutions of higher education, but also in relation to the industrial growth and development of the State and of the Nation, is such that a request for funds cannot be deferred pending the development of appropriate formulas. A total of $3 million has been included, as a part of the present request, for special research facilities at the University of Oklahoma and Oklahoma State University.

The State Regents are aware that this $3,000,000 will not be sufficient to meet the total needs of the two universities for special research facilities through 1975. They anticipate that it may be possible to supplement these funds through the commitment of funds set aside for contingency purposes. In addition, they anticipate that an additional request for funds for research space will be made when more definitive projection techniques have been developed by the research staff.

Need for Additional Study

The point that should be emphasized here is that the limitations of data and methodology are such the only basis for inclusion of funds for research in the present request is a conservative estimate. Every effort will be made during the next several months to develop the necessary data and methodology essential to sound projection of research facility needs.

When the needs of Oklahoma institutions of higher education for special research facilities have been carefully documented, high priority should be given to obtaining additional funds.

CHAPTER IX

SUMMARY OF FUNDS NEEDED AND PROPOSED FINANCING PLAN

New Construction

From the data presented in Chapters II-VII a total of 1,509,239 assignable square feet of space, as shown in Table 9.1., will be needed by 1975, to accomodate the instruction and instruction-related functions of institutions in The Oklahoma State System of Higher Education.

TABLE 9.1

SUMMARY OF SPACE NEEDED BY 1975

Type of Space	Assignable Square Feet
General Classrooms	123,994
Class Laboratories	379,477
Faculty Offices	172,425
Other Instructional	375,593
Library	261,276
Administration	196,474
TOTALS	1,509,239

Using an average cost of $36.30[1] per assignable square foot of space, a total of $54,800,000 will be required to meet the basic construction cost of providing this 1,509,239 square feet of space. It should be emphasized that the average cost of $36.30 per assignable square foot is an average and is not appropriate for use in determining the amount of funds needed for each camput. Among the reasons for this is the fact that the amount of each type of space needed will vary from campus to campus. Research is underway with a view toward the development of a series of "cost factors" appropriate for each type of space needed.

In addition to the funds needed for basic construction costs, funds will be needed for movable equipment, site development, and other non-structural improvements. Experience has shown that a minimum of 25% of the basic construction cost will be needed to provide for these items. On this basis, a total of $13,700,000 will be required for movable equipment and site development.

[1]Based on a ratio of .65 assignable square feet to gross square feet and $23.60 per gross square foot of space.

Air Conditioning

The current emphasis on year-round operation and increased utilization of instructional facilities focuses attention on the need for up-grading the quality of existing facilities. The most obvious area of need is for summer air conditioning.

The limited amount of capital outlay funds available in previous years made necessary the exclusion of summer air conditioning of most buildings constructed at colleges and universities in Oklahoma prior to 1960. Although a practical necessity at the time, this situation makes necessary a special effort at the present time to bring these facilities up to accepted standards.

To determine the extent of the need in this area, a building-by-building, campus-by-campus survey has been made to identify those buildings for which air conditioning is economically feasible and educationally desirable. With the assistance of a special consultant, cost estimates have been prepared for each building so identified. A detailed listing of the buildings and cost estimates is included in Appendix A.

The total estimate for all buildings shown is $6,106,770. In view of the present trend toward rapid increases in building costs, a contingency of 10-12% has been recommended by the consultant. This would bring the total to approximately $6,840,000. An additional $660,000 is estimated to be needed for a few buildings for which final estimates have not yet been completed. The overall total for this purpose is $7,500,000.

Research Facilities

Chapter VIII present a detailed picture of the current status of research facilities planning. As noted there, a minimum of $3,000,000 should be included in the present funding program for special research facilities. Following the completion of more definitive projections, additional funds will be requested based on the needs.

Technical Institutes

Another area of special concern for which facilities will be needed are the technical institutes located at Okmulgee and Oklahoma City. Since its organization following World War II the OSU School of Technical Training, Okmulgee Branch, has been housed in war surplus buildings, the majority of which were designed for temporary use. Funds are needed, therefore, not only to provide for an expanded program, but also to replace facilities which are inadequate for the programs which they are presently serving. The Oklahoma City Technical Institute is currently housed in

a former elementary school building made available by the Oklahoma City public school system which is inadequate for the expanding program of this institution.

Because of the unique nature of the instructional programs carried out at these institutions, the procedures developed for other institutions in the State System are not considered to be entirely appropriate. It is necessary, therefore, to make an estimate of the amount of funds needed for these institutions pending the development of more appropriate projection techniques. A total of $2 million is being requested for this purpose at the present time.

Contingency

Because of the high degree of uncertainty which exists at the present time regarding the rate of increase in building costs, and to partially cover the cost of unforeseen needs, $1,500,000 has been included as a contingency.

Summary

Table 9.2 presents a summary of the funds needed for capital improvements in The Oklahoma State System of Higher Education through 1975. From this table, it will be noted that of the $82.5 million, a total of $28 million is anticipated from Federal and other sources with the remaining $54.5 million to come from State funds.

Table 9.3 presents a summary of the funding schedule for the entire Ten-Year Capital Improvements Program including Phase One,

TABLE 9.2

SUMMARY OF FUNDS NEEDED FOR CAPITAL IMPROVEMENTS
THE OKLAHOMA STATE SYSTEM OF HIGHER EDUCATION[a]
1968-1975

Item	Total	State	Federal & Other
New Construction	$54,800,000	$36,500,000	$18,300,000
Non-Structural	13,700,000	10,000,000	3,700,000
Air Conditioning	7,500,000	5,000,000	2,500,000
Special Research Facilities	3,000,000	1,000,000	2,000,000
Technical Institutes	2,000,000	1,000,000	1,000,000
Contingency	1,500,000	1,000,000	500,000
TOTALS	$82,500,000	$54,500,000	$28,000,000

[a]Excludes School of Medicine and School of Nursing located at Oklahoma City.

now underway, and Phase Two, for which funds are yet to be provided.

During fiscal years 1966 and 1967 a total of 80 projects have been initiated with a total development cost of $45,688,874. A total of $28,853,452 in State matching funds has been required for these projects. As shown in Table 9.3., the remaining $9,646,548 available from the 1965 Building Bond Issue will fall $1,353,452 short of the amount needed to match Federal funds available during Fiscal 1968.

In projecting the need for funds to complete Phase Two, all facilities which can be funded from the 1965 Building Bond Issue have been taken into account. The additional State funds needed to complete Phase Two ($5,500,000) should be provided in annual increments of $10.9 million beginning in Fiscal 1969 and extending through Fiscal 1973. This schedule will insure that full benefit will be obtained from the Federal funds available for this purpose.

TABLE 9.3

FUNDING SCHEDULE
CAPITAL IMPROVEMENTS PROGRAM
THE OKLAHOMA STATE SYSTEM OF HIGHER EDUCATION
1965-1975

Purpose	Fiscal Year	Federal Funds	State Matching Required	State Bond Funds Balance
Bond Issue, Dec. 1965		. .	. .	$38,500,000
Specialized Facilities	1966-67[a]	. .	$ 1,612,500	36,887,500
Building Projects	1966	$7,379,252	13,773,468	23,114,032
Building Projects	1967	7,114,351	13,467,484	9,646,548
Building Projects	1968	5,500,000[b]	11,000,000	(1,353,452)[c]
Building Projects	1969	5,600,000[d]	10,900,000	
Building Projects	1970	5,600,000[d]	10,900,000	
Building Projects	1971	5,600,000[d]	10,900,000	
Building Projects	1972	5,600,000[d]	10,900,000	
Building Projects	1973	5,600,000[d]	10,900,000	

[a] Includes Okmulgee Tech, Langston Water Project, and OU Medical Center Speech and Hearing clinic.

[b] Total available to Oklahoma, Fiscal 1968 is $5,974,052; it is estimated that private and municipal institutions will receive $474,052, leaving a balance of $5,500,000.

[c] Due to a shortage of matching funds $676,726 may be lost to Oklahoma during Fiscal 1968.

[d] The amount shown does not include approximately $600,000 per year estimated for private and municipal institutions.

APPENDIX A

APPENDIX A

BUILDINGS FOR WHICH AIR CONDITIONING WILL BE NEEDED

University of Oklahoma

Gittenger Hall	$141,500
Gould Hall	204,000
Nielson Hall	223,700
Felger Hall	254,400
Kaufman Hall	165,400
School of Architecture	127,200

Oklahoma State University

Armory	$347,700
Home Economics	480,200
Whitehurst Hall	45,400
Veterinary Medicine	85,372

Central State College

Art Building (Existing Student Union)	$100,000
Mitchell Hall	17,130

East Central State College

Horace Mann Building	$125,216

Northeastern State College

Administration Building	$225,200
Education Building	130,486
Industrial Arts Building	19,175
Shops and Crafts Building	6,500

Northwestern State College

Herod Hall	$ 57,654
Industrial Arts	20,776
Fine Arts Building	198,000
Jesse Dunn	240,600

Southeastern State College

Classroom Building	$ 75,975
Home Economics Building	49,700
Industrial Education	59,360

Southwestern State College

Biological Science Building	$192,400
Administration Building	126,360
Education Building	151,600
Physical Education Building	26,500

Cameron State Agricultural College

Old Administration Building	$153,000
Science & Home Economics	82,300
Old Library	23,300
Fine Arts	35,900

Langston University

Administration Building	$ 94,340
Science-Agriculture	108,600
Steam Tunnel	200,000
Gymnasium	42,930
Mechanical Arts Building	10,000

Oklahoma Panhandle State College

Science Building	$ 15,000
Hughes-Strong Hall	16,000
Hesper Hall	50,900
Gymnasium	6,784

Connors State College

Library	$ 9,000
Administration & Classroom Building	40,960
Classroom Building	59,400

Eastern Oklahoma State College

Gunning Hall	$ 13,829
Mitchell Hall	45,050
Fine Arts Building	45,050

Murray State College

Administration Building	$224,100
Industrial Arts Building	20,458
Gymnasium	10,000
Library & Science Building	36,272

Northeastern Oklahoma A&M College

Shipley Hall	$ 86,792
Cunningham Hall	112,360
Copen Hall	92,200

Northern Oklahoma College

Wilkin Hall	$122,960
Harold Hall	54,060
Foster Piper Hall	29,235

Oklahoma Military Academy

Administration Building	$ 87,768
Meyers Barracks	186,602
Library Science	30,740
Engineering, Speech, Arts	37,312
Field House	11,872

APPENDIX B

OKLAHOMA STATE REGENTS FOR HIGHER EDUCATION
State Capitol, Oklahoma City

Instruction Sheet to Accompany State Regents' Form CMP 1-67

PURPOSE: The purpose of this form is to obtain Student-Credit-Hour data essential to updating the State Regents' Long-Range Capital Budgeting Program.

GENERAL INSTRUCTIONS: Enclosed are three copies of State Regents' Form CMP 1-67. One copy of this form should be completed and returned to the State Regents' office by October 13, 1967

DEFINITIONS OF TERMS: The terms defined below are those which apply to State Regents' Form CMP 1-67:

1. Resident Collegiate Enrollment: A student enrolled on the main campus of an institution taking a semester-hour course load applicable toward an associate, bachelor's or higher degree is a Resident Collegiate Enrollment, provided that the student is not enrolled in a program made up exclusively of courses for which a special workshop or extension fee is charged.

2. Classification by Level:

   a. Lower-Division: Lower-Division students are those who at the time of registration have completed a total of less than 64 semester hours of collegiate credit, except that all students attending two-year colleges should be considered as Lower-Division.

   b. Upper-Division: Upper-Division students are those who at the time of registration have completed 64 or more semester hours of collegiate credit, but have not as yet completed the requirements for a bachelor's or higher degree. (Four-year institutions which do not offer graduate-level work should report post-graduate students as Upper-Division).

   c. Graduate-Division: Graduate-Division students are those who at the time of registration have completed the requirements for or have been awarded a bachelor's or higher degree and are now enrolling in the graduate school or division. Institutions with professional schools requiring the completion of a bachelor's degree for entrance should classify such students as "Graduate-Division". (Institutions which do not offer graduate-division work should not report enrollments in this category).

OKLAHOMA STATE REGENTS FOR HIGHER EDUCATION
State Capitol, Oklahoma City

Institution's Projection of Student-Credit-Hour Production by Level
(Form CMP 1-67)

Institution_____ Date_____

Completed by_____ Title_____

Instructions: Enter below the number of Student-Credit-Hours expected to be produced at each Academic Level for the Fall Semester of the years indicated. Report on this form only those Student-Credit-Hours produced by main campus, Resident Collegiate Enrollments.

Level	Student-Credit-Hours					
	1966 (Actual)	1967 (Est.)	1968 (Proj)	1969 (Proj)	1970 (Proj)	1975 (Proj)
Lower Division						
Upper Division						
Graduate Division						
TOTALS						

Oklahoma State Regents for Higher Education
State Capitol, Oklahoma City

Instructional Load Data Report, Fall, 1967
(Form CMP 2-67)

Instructions and Definitions

Form CMP 2-67 is designed to simplify the procedure for reporting data pertinent to the State Regents study of classroom and laboratory utilization. This study is essential to the assignment of priorities to applications received by the State Commission for Title I of the Higher Education Facilities Act of 1963. The data is also necessary as a basis for the projection of the long-range needs for academic facilities at each institution.

The completed forms should be received in the State Regents' office no later than October 13, 1967.

Complete one line of Form CMP 2-67 for each regularly scheduled degree-credit course and/or section taught during the 1967 Fall semester. Courses with both a lecture and a laboratory section will require two lines. List only courses taught on the campus as a part of the institution's normal residence-study program, excluding courses taught off campus, by extension, or by correspondence. No courses should be included for which college credit is not given.

Institution (Columns 1-10): Enter the abbreviated name of the institution in the spaces provided. Place the first alphabetic character in the first space; i.e., if the "Name" contains less than 10 letters, the blank spaces should be at the right of the field.

EXAMPLE:

Y	O	U	R	_	C	O	L	L	E
1	2	3	4	5	6	7	8	9	10

Institution-Code (Columns 11-13): This code will be assigned by the State Regents office.

Department-Name (Columns 14-22): Enter the name of the department at your institution in which the course is taught. A course that is recognized in more than one department (such as "English 101" same as "Speech 101") should have entry made under only one department, the one to which it is principally attached.

EXAMPLE:

E	N	G	L	I	S	H		
14	15	16	17	18	19	20	21	22

Department-Code (Columns 23-26): This code will be assigned by the State Regents' office based on a standard classification system.

Course Number (Columns 31-35): Enter the number by which the course is identified in the institutional catalog and class schedule. In general, columns 32-34 should be used for a typical three-digit course number. Column 31 should be used for any rooms numbered 1000 and above. This column may also be used for alphabetic prefixes where they occur. Column 35 should be used for alphabetic suffixes. Columns 31 and 35 should be left blank where a prefix and/or suffix do not occur. Columns 32-34 should have an entry in each column.

EXAMPLE: _ (31) 1 (32) 0 (33) 1 (34) A (35) for Course 101A.

Course Level (Column 36): Enter the letter "L" for lower-division undergraduate courses; "U" for upper-division undergraduate courses; and "G" for graduate level courses. Where the level is not shown, the course will be treated as a lower-division undergraduate course.

Credit Hours (Column 37): Enter the number of credit hours a student enrolled in this course will receive. If a course is listed for an indefinite credit value such as "credit to be arranged", or "1-5 credits", enter as the credit value the whole number nearest to the average amount of credit granted per student taking the course for credit.

EXAMPLE: 3 (37) for a 3-hour course.

Weekly Student Clock Hours (Column 38): Enter the number of hours each student enrolled will be required to spend in supervised instruction on the campus during each week of the semester. This number should agree with the regular schedule of class meetings. Extra meetings or study sessions should not be included. Courses listed "to be arranged" would normally be expected to carry the same number of clock hours as credit hours.

EXAMPLE: 3 (38) for a course meeting three hours per week.

Number of Students Enrolled (Columns 39-42): Enter the number of students enrolled for credit in each course as of the first full week after which students are no longer eligible to enroll in classes.

EXAMPLE: 0 (39) 0 (40) 9 (41) 5 (42) for a class with 95 students enrolled.

Building-Name (Columns 43-51): Enter the name of the Building as shown on the State Regents' Inventory of Facilities.

Building-Number (Columns 52-55): Enter the code number assigned to the building in the State Regents' Inventory of Facilities.

EXAMPLE: 0 (52) 0 (53) 1 (54) 2 (55) for building number 12.

Room Number (Columns 56-60): Enter the room number assigned to the room. This number must correspond with the room number shown on the State Regents' Inventory of Facilities. In general, Columns 57-59 should be used for a typical three-digit room number. Column 56 should be used for any rooms numbered 1000 and above. This column may also be used for alphabetic prefixes where they occur. Column 60 should be used for alphabetic suffixes.

Columns 56 and 60 should be left blank where a prefix and/or suffix do not occur. Columns 57-59 should have an entry in each column. Courses meeting in a type of room other than the type best suited for the course (such as lecture courses meeting in laboratory rooms) should be so identified by a footnote.

EXAMPLE:

56	57	58	59	60
	0	2	1	C

for Room 21C.

Form CMP 2-67 is designed to be used either as a report form or as the card format for preparation of a deck of data processing cards containing the required information.

State Capitol, Oklahoma City

Instructional Load Data Report, Fall, 1967
Form CMP 2-67

Institution $\overline{1}\ \overline{2}\ \overline{3}\ \overline{4}\ \overline{5}\ \overline{6}\ \overline{7}\ \overline{8}\ \overline{9}\ \overline{10}$ Institution Code $\overline{11}\ \overline{12}\ \overline{13}$ Date $\overline{61}\ \overline{62}$

Department		Course No.	Course Level	Credit Hours	Weekly Student Clock Hours	Number of Students Enrolled	Building		Room Number		
Name	Code						Name	Number			
14-22	23-26	31-35	36	37	38	39-42	43-51	52-55	56	57-59	60

Completed By_____ Date_____ Page _____ of _____ Pages.

OKLAHOMA STATE REGENTS FOR HIGHER EDUCATION
State Capitol, Oklahoma City

Form CMP 3-67

Worksheet for Projecting Additional Space Needs

Institution _____ Date _____

Type of Space	Total Space Available 9/67 (1)	Space to be Withdrawn From Use (2)	Net Permanent Space Available 9/67 (3)	Space Needs Projected To 1975 (4)	Additional Space Needed By 1975 (4) - (3) (5)	Space Under Construction or for which funds are available (6)	Net Additional Space for which funds are needed (7)
General Classrooms							
Class Laboratories							
Faculty Offices							
Other Instructional							
LIBRARY							
ADMINISTRATION							
RESEARCH							

Oklahoma State Regents For Higher Education
State Capitol, Oklahoma City

Supplement to Form CMP 3-67

Institution _____

A. Enrollment Data	1967	1975	Rate of Change
Lower Division	_____	_____	_____%
Upper Division	_____	_____	_____%
Graduate Division	_____	_____	_____%
Totals			

B. Utilization Data

Weekly Student Clock Hours

	1967	Rate of Change	1975	Factor	Sq. Ft.
(110) General Classrooms	_____	_____%	_____	_____	_____
(210) Laboratories	_____	_____%	_____	_____	_____
1200 Life Science	_____	_____%	_____	_____	_____
1300 MCPE Sciences	_____	_____%	_____	_____	_____
1400 Behavioral Sciences	_____	_____%	_____	_____	_____
1500 Humanities	_____	_____%	_____	_____	_____
1600 Professions	_____	_____%	_____	_____	_____
1700 Technical-Vocational					
_____	_____	_____%	_____	_____	_____
_____	_____	_____%	_____	_____	_____
_____	_____	_____%	_____	_____	_____
General	_____	_____%	_____	_____	_____
210 - Total	_____	_____%	_____	_____	_____
215 _____	_____	_____%	_____	_____	_____
230 _____	_____	_____%	_____		
310 _____	_____	_____%	_____		
520 _____	_____	_____%	_____	_____	_____
Total WSCH _____	_____	_____%	_____		

OKLAHOMA STATE REGENTS FOR HIGHER EDUCATION
State Capitol, Oklahoma City

Procedures For Updating Facilities Inventory
Fall, 1967
(Instructions to accompany Form CMP 4-67)

Data obtained by means of a room inventory are important in the administration and planning which is carried on by institutional personnel as well as being essential to the performance of long-range planning by the Oklahoma State Regents For Higher Education. In addition to using the data for long-range planning purposes, the State Regents' responsibility in connection with the Higher Education Facilities Act of 1963 makes such data necessary.

Minimal requirements for a room inventory require the ability to distinguish one room from another. For this purpose a room number and building designation are necessary and sufficient. Since one of the basic questions to be answered by the inventory is "how much?", a quanitative measure generally referred to as "assignable square feet" is used as the unit to be summed.

To the more complex question of "how much of each kind?", three attributes of a room are identified:

1) Type of room -- for example, classroom, laboratory, office, etc.
2) Organizational unit (to which the room is assigned for use: -- for example, physical sciences, social sciences, library, general administration, etc.
3) Function -- for example, instruction, research, public service, etc.

For a limited group of rooms -- classrooms, class laboratories, and study facilities -- the number of student stations are also important.

In addition to the above types of statistical data regarding the rooms included in the inventory, the use of the inventory by people unfamiliar with the coding system makes it advisable to include a non-technical description of each room as a part of the inventory print-out.

For those institutions who have previously participated in the State Regents Study of Facilities, the 1967 update will involve a minimum of effort. A computer print-out has been prepared based on the inventory for the fall term, 1966. The basic change which has been made since the time of the previous inventory is that a national Facilities Classification System has been adopted which will be used in all 50 states beginning this fall.

All of the data shown on the computer print-out should be reviewed to verify the accuracy and completeness of the data. Any changes or corrections which are indicated by this review should be noted on the print-out. Where additional rooms have been added, these should be listed on a room inventory form and attached to the print-out.

Form CMP 4-67 should be used for providing the basic data for all buildings not included in the previous inventory or for buildings which have undergone substantial alterations since the previous inventory. A separate Form CMP 4-67 should be prepared for each building. Complete one line for each room in each building using as many copies of the form as are necessary. In general, each room should be included only once. (See Proration below for exceptions.)

Building Name (Columns 1-9): Print the "Short Building Name" in the spaces provided. Place the first alphabetic character in the first space; i.e., if the "Short Building Name" contains less than 9 letters, the blank spaces should be at the right of the field.

EXAMPLE:

P	H	Y	S		S	C	I	
1	2	3	4	5	6	7	8	9

for the Physical Sciences Building.

Building Code (Columns 10-13): Enter the institutional code number assigned to this building. This must be the same code number assigned to buildings in the Building Inventory and room cards for the utilization studies. All columns should have an entry.

EXAMPLE:

0	0	0	7
10	11	12	13

where the building number is 7.

Institution Code (Columns 77-79): Enter the appropriate code of the institution.

EXAMPLE:

1	1	0
77	78	79

for the institution whose code number is 110.

Room Number (Columns 14-18): Enter the room number assigned to the room. In general, Columns 15-17 should be used for a typical three-digit room number. Column 14 should be used for any rooms numbered 1000 and above. This column may also be used for alphabetic prefixes where they occur. Column 18 should be used for alphabetic suffixes.

Columns 14 and 18 should be left blank where a prefix and/or suffix do not occur. Columns 15 to 17 should have an entry in each column.

EXAMPLE:

	0	2	1	C
14	15	16	17	18

for Room 21C

Square Feet (Columns 19-24): Enter the number of assignable square feet in the room. For basis of measurement see Appendix C, Facilities Classification and Inventory Procedures for Institutions and State Agencies, U.S.O.E., August, 1967. All columns should have an entry.

EXAMPLE: 0 (19) 0 (20) 1 (21) 6 (22) 5 (23) 7 (24) for a room with 1657 square feet.

Room Description (Columns 25-40): This space is provided for entering a non-technical description of the room which will be used in assigning standard codes as well as identifying the room for persons unfamiliar with the coding system.

Capacity (Columns 42-44): Enter the capacity of the room for the following types of rooms ONLY:

110 Classrooms
210 Class Laboratory
410 Study Rooms
420 Stack
430 Open-Stack Reading Room
610 Assembly Facilities

EXAMPLE: 0 (42) 3 (43) 2 (44) for a room with 32 stations.

Department-Alpha: This space is provided for entering a departmental designation at the time of the inventory. It will not be keypunched, but will be used in determining the standard departmental code.

EXAMPLE: Chemistry for a room assigned to Chemistry.

Department-Standard Code (Columns 49-52): Enter the numeric code from Appendix D, Facilities Classification and Inventory Procedures for Institutions and State Agencies, U.S.O.E., August, 1967, which designates the department (or other organizational unit) to which the room is assigned. (See Proration below.)

EXAMPLE: 1 (49) 3 (50) 3 (51) 0 (52) for a room assigned to Chemistry.

Type of Room-Alpha: This space is provided for entering a type of room designation at the time of the inventory. It will not be keypunched, but will be used in determining the standard type of room code.

EXAMPLE: Class Lab for a Class Laboratory.

Type of Room Standard Code (Columns 63-65): Enter the numeric code from Appendix E, Facilities Classification and Inventory Procedures for Institutions and State Agencies, U.S.O.E., August, 1967, which designates the type of room. (See Proration below.)

EXAMPLE: 2 (63) 1 (64) 0 (65) for a Class Laboratory.

Function-Standard Code (Columns 68-69): Enter the numeric code from Appendix F, Facilities Classification and Inventory Procedures for Institutions and State Agencies, U.S.O.E., August, 1967, which designates the function served by the room. (See Proration below.)

EXAMPLE: 1 0 (68 69) for a room whose function is Instruction.

Proration (Column 70): This system classifies each room according to three attributes: Organizational Unit, Type of Room, and Function. The system allows for the possibility that a given room may be assigned to more than one department, and/or may represent more than one type of room, and/or may serve more than one function.

Despite this flexibility it is strongly recommended that proration on the basis of Department and/or Type of Room be avoided wherever possible. If the square feet in the room are NOT to be prorated, then Column 70 should be left blank.

If the square feet in a room are to be prorated, a "T" should be entered in Column 70 for that card which contains the Total square feet in the room.

Additional cards representing the prorated portions of square feet in the room distributed to appropriate Departments and/or Types of Rooms and/or Function should be coded "P" in Column 70.

The purpose of this column is to provide a visual cue on printed lists that the square footage has been prorated. The designation for type of proration is a function of the coding system:

Department Proration:	9999 (Columns 49-52)
Type of Room Proration	999 (Columns 63-65)
Function Proration	99 (Columns 68-69)

EXAMPLE 1: For a room shared equally by two departments:

Square Feet 19-24	Department 49-52	Type 63-65	Function 68-69	P/T 70
000250	9999	310	10	T
000125	1330	310	10	P
000125	1310	310	10	P

Line 1 above indicates the total square footage in the room.
Line 2 prorates one-half the space to Chemistry (1330) and
Line 3 prorates one-half the space to Mathematics (1310).

EXAMPLE 2: For a room serving two purposes and two departments:

Square Feet 19-24	Department 49-52	Type 63-65	Function 68-69	P/T 70
000500	9999	999	99	T
000300	1330	250	20	P
000100	1330	310	10	P
000100	1310	310	10	P

Line 1 indicates the total square footage in the room.
Line 2 indicates 300 square feet are used by Chemistry (1330) for a Non-Class Laboratory (250) for Research purposes (20).
Line 3 indicates that 100 square feet are used by Chemistry (1330) for office space (310) for Instructional purposes (10).
Line 4 indicates that 100 square feet are used by Mathematics (1310) for office space (310) for Instruction purposes (10).

Date (Columns 71-72): Enter the last two digits of the year in which the updating occurred.

EXAMPLE: 6 7 (71 72) for rooms updated in 1967.

ARY OF STANDARD CLASSIFICATION OF ORGANIZATIONAL UNITS & SUBJECT FIELDS

DEPTS. OF INSTRUCTION & RESEARCH

1100 GENERAL OR UNCLASSIFIED
- 1110 General
- 1120 Unclassified
- 1199 (Classrooms)

1200 LIFE SCIENCES
- 1210 Biological Sciences
- 1220 Agricultural Sci.
- 1230 Health Sciences
  - 1231 Medicine
  - 1232 Veterinary Med.
  - 1233 Dentistry
  - 1234 Nursing
  - 1235 Pharmacy
  - 1236 Public Health
  - 1238 Other
  - 1239 General
- 1299 General Life Sci.

1300 M.C.P.E. SCIENCES
- 1310 Mathematical Sci.
- 1320 Computer Sciences
- 1330 Physical Sciences
- 1340 Engineering Sciences
- 1399 General MCPE Sci.

1400 BEHAVIORAL SCIENCES
- 1410 Psychology
- 1420 Social Sciences
- 1499 Gen. Behavioral Sci.

1500 HUMANITIES
- 1510 Fine Arts
- 1520 Letters
- 1599 General Humanities

1600 PROFESSIONS
- 1610 Admin. Professions
- 1620 Education
- 1630 Environmental Design
- 1640 Home Economics
- 1650 Law
- 1660 Social Work
- 1670 Theology
- 1690 Other Professions
- 1699 General Professions

(Continued in next column)

1700 TECHNICAL-VOCATIONAL
- 1705 Agricultural
- 1710 Apparel
- 1715 Business
- 1720 Construction
- 1725 Engin'g & Indust'l
- 1730 Graphic Arts
- 1735 Health
- 1750 Public Service
- 1760 Transportation
- 1790 Other
- 1799 General

1800 PHYS. EDUC. & MIL. SCI.
- 1810 Physical Education
- 1820 Military Sciences

2000 ORGANIZED ACTIVITY UNITS

2100-2820: Same as 1100-1820

3000 ORGANIZED RESEARCH UNITS

3100-3820: Same as 1100-1820

4000 PUBLIC SERVICE UNITS

4100-4820: Same as 1100-1820

5000 LIBRARY

6000 GEN. ADMIN. & INST'L SERVICES

7000 AUXILIARY SERVICES

8000 NON-INSTITUTIONAL AGENCIES

9000 UNASSIGNED
- 9081 Inactive
- 9082 Alteration or Conversion
- 9083 Unfinished

(See USOE Manual for definitions of the above categories.)

STANDARD TYPE OF ROOM CLASSIFICATION

100 CLASSROOM FACILITIES

110 Classroom
115 Classroom Service

200 LABORATORY FACILITIES

210 Class Laboratory
215 Class Laboratory Service

220 Special Class Laboratory
225 Special Class Laboratory Service

230 Individual Study Laboratory
235 Individual Study Laboratory Service

250 Non-Class Laboratory
255 Non-Class Laboratory Service

300 OFFICE FACILITIES

310 Staff Office
311 Staff Assistant Office
312 Secretarial-Clerical Office
315 Office Service

350 Conference Room
355 Conference Room Service

400 STUDY FACILITIES

410 Study Rooms

420 Stack

430 Open-Stack Reading Rooms

440 Library Processing Rooms

455 Study Facilities Service

500 SPECIAL-USE FACILITIES

510 Armory Facilities
515 Armory Facilities Service

520 Athletic-Physical Education Facilities
523 Athletic Facilities Spectator Seating
525 Athletic-Physical Education Facilities Service

530 Audio-Visual, Radio, TV Facilities
535 Audio-Visual, Radio, TV Facilities Service

TYPE OF ROOM CLASSIFICATION (Continued)

540 Clinic Facilities (Non-Medical)
545 Clinic Facilities Service (Non-Medical)

550 Demonstration Facilities
555 Demonstration Facilities Service

560 Field-Service Facilities

590 Other Special-Use Facilities
595 Other Special-Use Facilities Service

600 GENERAL-USE FACILITIES

610 Assembly Facilities
615 Assembly Facilities Service

620 Exhibition Facilities
625 Exhibition Facilities Service

630 Food Facilities
635 Food Facilities Service

640 Health Facilities (Student)
645 Health Facilities Service (Student)

650 Lounge Facilities
655 Lounge Facilities Service

660 Merchandising Facilities
665 Merchandising Facilities Service

670 Recreation Facilities
675 Recreation Facilities Service

690 Other General-Use Facilities
695 Other General-Use Facilities Service

700 SUPPORTING FACILITIES

710 Data Processing-Computer Facilities
715 Data Processing-Computer Facilities Service

720 Shop Facilities
725 Shop Facilities Service

730 Storage Facilities
735 Storage Facilities Service

740 Vehicle Storage
745 Vehicle Storage Service

750 Central Food Stores
760 Central Laundry

790 Other Supporting Facilities
795 Other Supporting Facilities Service

TYPE OF ROOM CLASSIFICATION (Continued)

800 MEDICAL CARE FACILITIES

810 Human Hospital-Clinic Facilities
815 Human Hospital-Clinic Facilities Service

820 Human Hospital-Patient Care Facilities
825 Human Hospital-P tient Care Facilities Service

840 Dental Clinic Facilities
845 Dental Clinic Facilities Service

850 Veterinary Hospital-Clinic Facilities
855 Veterinary Hospital-Clinic Facilities Service

860 Veterinary Hospital-Animal Care Facilities
865 Veterinary Hospital-Animal Care Facilities Service

900 RESIDENTIAL FACILITIES

910 Residence for Single Persons
911 Dormitory
912 Food Service in Residence Halls

920 One-Family Dwelling

930 Multiple Family Dwelling

999 PRORATE

000 NON-ASSIGNABLE AREA (See Appendix C for definitions.)

010 Custodial Area

020 Circulation Area

030 Mechanical Area

040 Construction Area

080 UNASSIGNED AREA

081 Inactive Area

082 Alteration or Conversion Area

083 Unfinished Area

FUNCTION CATEGORIES

10 Instruction
15 Organized Activities Relating to Instruction

20 Research

30 Public Service

40 Library

50 General Administration and Institutional Services
55 Physical Plant

60 Auxiliary Services

70 Non-Institutional Agencies

80 Unassigned Area

- 81 Inactive Area
- 82 Alteration or Conversion Area
- 83 Unfinished Area

99 Prorate

00 Non-Assignable Area

- 01 Custodial Area
- 02 Circulation Area
- 03 Mechanical Area
- 04 Construction Area

Oklahoma State Regents for Higher Education
State Capitol, Oklahoma City

Room Inventory Data Sheet
Form CMP 4-67

Building Name 1 2 3 4 5 6 7 8 9 Building Number 10 11 12 13 Institution 77 78 79

Room Number			Square Feet	Room Description (Alpha)	+ -	Capacity	Department		Type of Room		Function	P T	Date
							Alpha	Code	Alpha	Code			
14	15-17	18	19-24	25-40	41	42-44		49-52		63-65	68-69	70	71-72

Oklahoma State Regents for Higher Education
State Capitol, Oklahoma City

INSTRUCTIONS FOR COMPLETION OF FORM CMP 5-67
Building Inventory Data Sheet

One copy of Form CMP 5-67 should be completed for each building on the campus. Normally all wings of a single structure will be treated as a single building, however, in some cases where the separate portions of a structure are essentially self-contained and serve completely diverse functions it may be appropriate to treat them as separate buildings. This will also be the case where two buildings are connected by a covered walkway or enclosed hallway.

The name of the building should be the name by which the building is identified on the records of the institution. Where a building has both a formal name and a common designation, the name by which the building is listed in the class schedule or campus guide should be used.

The Building Number should be the number by which the building is identified in the institutional records. This number must correspond with the number assigned in the Room Inventory.

Gross Square Feet: The basis for determining gross square feet is described in detail in Appendix C of Facilities Classifications and Inventory Procedures for Institutions and State Agencies, Office of Education, August 1967.

Actual Capital Investment: To the nearest thousand dollars, the plant fund investment for the building should be recorded including funds for building additions or capitalized renovations.

Ownership: The basis on which the building is available for use by the institution should be indicated according to the following codes:

1. Owned by the institution or is being paid for on an amortization schedule;

2. Not owned, but leased or rented to the institution at a typical local rate;

3. Not owned by the institution, but made available to it at either no cost or at a nominal rate;

4. Title now vested in a holding company or building corporation to which payments are being made by the institution; title will ultimately pass to the institution. (Includes lease-purchase arrangements.)

5. Not owned by the institution, but shared with an institution of less than college level;

6. Shared with another institution of college level.

Condition: The following codes should be used:

1. The building is in satisfactory condition;

2. Continue in use indefinitely with minor rehabilitation (less than 10% of the cost of replacement needed for rehab);

3. Continue in use indefinitely with major rehabilitation (from 10 to 40% of the cost of replacement needed for rehab).

(Only buildings which have been adjudged to be structurally sound by a licensed structural engineer should be included in the above categories).

4. Continue in use with appropriate rehabilitation due to historical significance.

5. The building should be razed.

Type of Construction: The following codes should be used:

1. Wood Frame.

2. Masonry.

3. Steel Frame.

4. Reinforced Concrete.

5. Other.

Number of Floors: Enter the number of separate levels of the building excluding basements, sub-basements, attics, or penthouses which contain only building service facilities.

Percent Air Conditioned: Enter the percentage of the assignable area of the building served by summer air conditioning.

Oklahoma State Regents for Higher Education
State Capitol, Oklahoma City

Building Inventory Data Sheet
Form CMP 5-67

Institution Name _____

Institution Number $\overline{77}\ \overline{78}\ \overline{79}$

Building Name _____

Short Building Name $\overline{1}\ \overline{2}\ \overline{3}\ \overline{4}\ \overline{5}\ \overline{6}\ \overline{7}\ \overline{8}\ \overline{9}\ \overline{10}\ \overline{11}\ \overline{12}\ \overline{13}\ \overline{14}$

Building Number $\overline{15}\ \overline{16}\ \overline{17}\ \overline{18}$

Gross Square Feet $\overline{19}\ \overline{20}\ \overline{21}\ \overline{22}\ \overline{23}\ \overline{24}$

Actual Capital Investment $\overline{38}\ \overline{39}\ \overline{40}\ \overline{41}$ (thousand)

Ownership $\overline{42}$

Condition $\overline{43}\ \overline{44}$

Type of Construction $\overline{45}$

Number of Floors $\overline{46}\ \overline{47}$

Percent Air Conditioned $\overline{48}\ \overline{49}\ \overline{50}$